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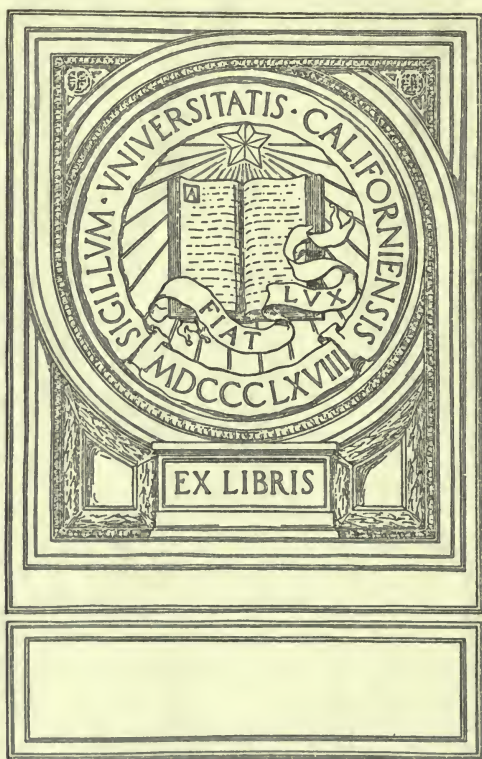
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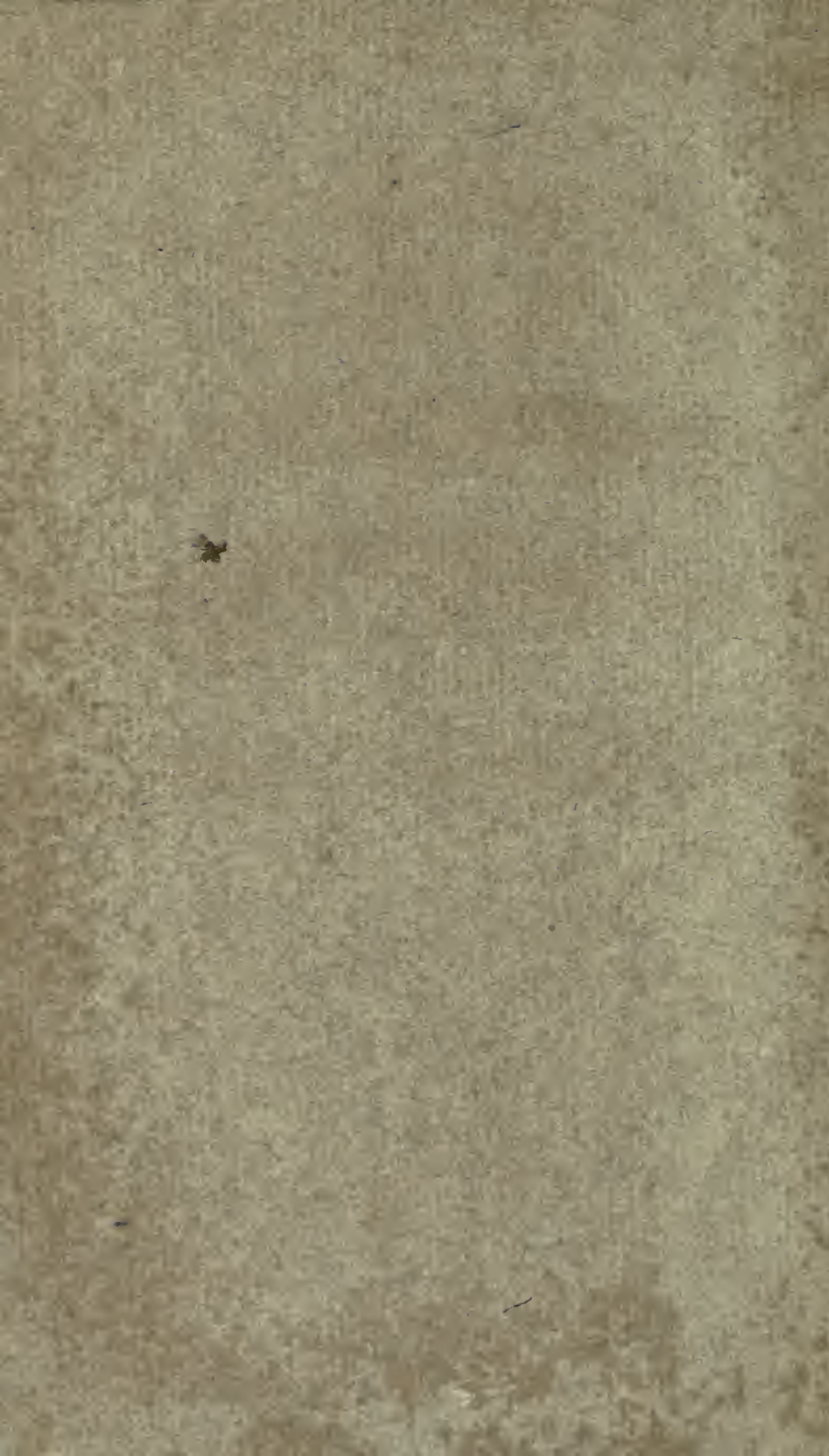


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REGULATIONS
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FOR THE
DISCIPLINE OF INFANTRY,
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ADJUTANT GENERAL'S OFFICE,

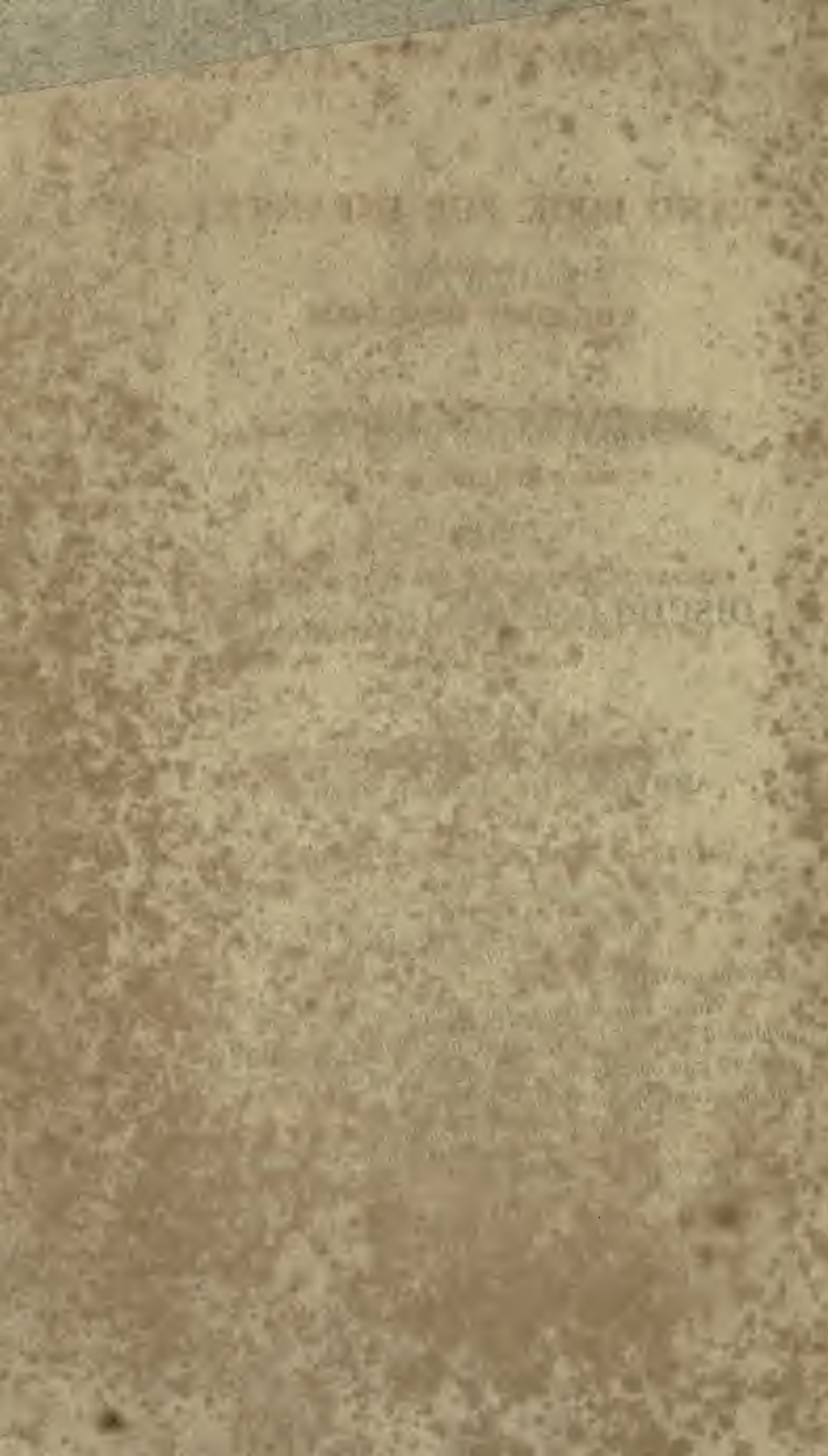
WASHINGTON CITY, 19th March, 1813.

GENERAL ORDERS.

The "Hand Book for Infantry," compiled and published by William Duane, of Philadelphia, will be received and observed as the system of Infantry Discipline for the Army of the United States.

By order of the Secretary of War,

T. H. CUSHING, Adj. Genl.



A
HAND BOOK FOR INFANTRY:

CONTAINING

THE FIRST PRINCIPLES

OF

MILITARY DISCIPLINE,

FOUNDED ON RATIONAL METHOD:

INTENDED

TO EXPLAIN IN A FAMILIAR AND PRACTICAL MANNER,

**FOR THE USE OF THE MILITARY FORCE OF THE
UNITED STATES,**

THE

MODERN IMPROVEMENTS

IN THE

DISCIPLINE AND MOVEMENT OF ARMIES.

THE NINTH EDITION.

BY WILLIAM DUANE,

ADJUTANT GENERAL IN THE ARMY OF THE UNITED STATES.

C'est la discipline militaire qui fait la gloire du soldat et la force des armées,
car elle est le plus grand acte de son dévouement et le gage le plus assuré
de la victoire. CARNOT, 1811.

PHILADELPHIA:

PRINTED FOR THE AUTHOR.

.....

1814.

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1814

DISTRICT OF PENNSYLVANIA, TO WIT:

* BE IT REMEMBERED, that on the 20th day of June, in the
* thirty-sixth year of the Independence of the United States of
* L. S. * America, A. D. 1812, William Duane of the said district, hath de-
* posited in this office, the title of a book, the right whereof he claims
* as author, in the words following, to wit: "A Hand Book for
"Infantry: Containing the First Principles of Military Discipline, Founded on
"Rational Method; intended to explain in a familiar and practical manner, for
"the use of the Military Force of the United States, the Modern Improvements
"in the Discipline and Movement of Armies: By William Duane. C'est la
"Discipline militaire qui fait la gloire du soldat et la force des armées, car
"elle est le plus grand aete de son dévouement et le gage le plus assuré de la
"victoire. Carnot....1811."

In conformity to the act of the Congress of the United States, intituled "an act for the encouragement of learning, by securing the copies of maps, charts, and books, to the authors and proprietors of such copies during the times therein mentioned;" And also to the act, entitled "an act supplementary to an act, entitled 'an act for the encouragement of learning, by securing the copies of maps, charts, and books, to the authors and proprietors of such copies during the times therein mentioned,' and extending the benefits thereof to the arts of designing, engraving, and etching historical and other prints."

D. CALDWELL,

Clerk of the District of Pennsylvania.

1814
Clerk
Washington Library

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A HAND BOOK FOR INFANTRY.

CHAP. I.

THE PRINCIPLES OF MILITARY DISCIPLINE.

THE movements of men in military order and in a military manner, form the first and most important of all the duties of the military art ; they are the immediate objects of a good discipline. Understood, this is the simplest of all arts ; perhaps it may be attributed to this circumstance, that it is not attended to in the manner it should be.

“ It is military discipline,” says CARNOT, in a work published in 1811, “ which constitutes the glory of the soldier, and the power of armies.”

The great perfection of military discipline is to be found in the art of *marching* well ; or, as the celebrated Marshal Saxe expressed it : “ *All the mystery of military discipline is to be found in the legs, and he who thinks otherwise is a fool.*”

The celebrated *Guibert*, another distinguished military man, thus expresses himself—“ The Greeks and Romans had a regular *cadenced march* ; what its measure was we are ignorant. It is in our time” (during the seven years’ war between 1755 and 1763) “ that the *cadenced march* has been introduced in European armies ; I may say discovered, as for many years it slept in obscurity. Marshal Saxe esteemed it as the most interesting circumstance, and which ought one day to mark a great epocha in the improvement of *tactics*. This great man seemed as though he had the skill of foretelling the revolutions which were to be made in the principles of this science, when he wrote, in his *Reveries*, that *all the mystery of tactics was to be found in the legs.*”

“ So essential,” says Saxe, “ is marching in cadence, that the army which marches best, must, every thing else being equal, in the end prevail.”

In his chapter upon formation, Saxe says—"I propose to treat of this subject in a manner so new, and it is a copious one, that I shall probably expose myself to ridicule, but I shall nevertheless examine it. I begin with the march: which subjects me to the necessity of advancing what will appear very extravagant to the ignorant. According to the present method, the march is accompanied with confusion, noise, and fatigue, without any other effect; the sole remedy for which appears to be a secret left for me to disclose. As every man is suffered to consult his own ease, some march fast, some slow. What can be expected of troops that cannot be brought to move in one regular pace, quick or slow, as directed by the commanding officer; or, as the exigency may require, and that an officer is obliged to be posted at every turn to hasten the rear? If, on a march, the front be ordered to quicken its pace, the rear must unavoidably lose ground before it can perceive the fault: to recover the ground, the rear sets to run; the head of the succeeding corps will do the same; and the whole appears a scene of disorder; thus it becomes impossible to march a body with expedition, without forsaking all order and regularity.

"The way to obviate these inconveniences, and many others of greater consequence, is *very simple*, because dictated by nature; it is nothing more than to march in *cadence*, in which alone consists the whole mystery, and which answers to the military pace of the Romans. It was to preserve this, that martial music was first invented, and drums introduced. In this sense, strictly, is the word *tactics* to be understood. By means of the cadence, you will always be able to regulate your pace at pleasure. If all march equally to the cadence, all will march over an equal distance, by an equal number of paces in equal times. Your rear can never lag behind; and the whole will step with the same foot; your wheelings will be formed with celerity and exactness; your men's legs will not mix together, and the fatigue will not be in any degree like the present irregularity. Nothing is more common than to see a number of persons dance together a whole night with pleasure; but, deprive them of music, and the most ind fatigable of them will not be able to bear it two hours with any satisfaction. If it be asked, what particular airs I would

“recommend ; I answer, without being moved by this raillery...
 “*gay airs in triple time. Marching composed the principal part*
 “*of the Roman discipline.*” Saxe, book 1, chap. 1. art. 6.

This celebrated soldier was not railed at...but he was imitated, and the Great Frederick thought like him. General Lloyd, a celebrated Englishman, who served in the Austrian service, says, in the preface to the history of the German war ...“Of all the
 “mechanical parts of war, none is more essential than *marching*,
 “which may be justly called *the key* which opens to us all the
 “sublime motions of an army ; *for they depend altogether upon*
 “*marching well.*”

Saldern, bred in the school of Frederic, in his Elements of Tactics, part 1, p. 1, 2, says....“The most essential thing in the
 “instruction of a soldier is *marching* ; by frequent exercise,
 “a large body of men moves with as much facility and order
 “as a small one, and marching constitutes the basis of the
 “science.”

A work was published by an officer of the British staff, adjutant general Armstrong, in 1808, it is entitled....“*Practical*
 “*Observations on the errors committed by generals and field*
 “*officers, &c. from 1743, to the present time*”....this judicious officer attributes the greater number of the failures to bad discipline, or the want of system ; and dwells upon the importance of the elementary knowledge in the following eloquent style....

“Marching has, with great propriety, been deemed the first and most essential principle in field operations. The precision with which troops move, renders it easy for a general officer to calculate with accuracy, the exact time at which a combined attack may be executed ; and he is hereby enabled to regulate the movements of his columns from various distances to the scene of action, with ease and certainty ; an improvement unquestionably of modern introduction ; and if *celerity* were joined with *precision* in combined operations, the advantages would be incalculable ; as it may with great truth be asserted, that the success of a war has frequently depended more upon the vigorous use of the legs, than on the united effects of cannon, musquetry, and the sword. Indeed, it seems to be admitted by sir David Dundas, “that celerity in change of place cannot be too great when consistent with order, as it gives the enemy less time to see the intention, or to counteract such movement ;” in advancing to an attack under the fire of artillery ; in anticipating an

enemy in seizing a post or position ; instantaneous movements, executed with rapidity, must be of the greatest importance, and attended with the most decisive effects....should not our infantry therefore, march with greater quickness than at the rate of 2 1-4 miles in an hour ? Had not *Napoleon* in his Italian campaigns outmarched the Austrians, the events of the war had probably been very different....had his march from *Dijon* to *Marengo*, from the shores of the channel to the plains of *Austerlitz* ; and from the interior of France to the fields of *Jena*, been conducted on the slow principles of German tactics, *Austria* might still have preserved her immense power, and the *Prussian* monarchy have maintained its independence."

These authorities are here introduced for two purposes ; the first, to repel the objections of prejudice and ignorance against novelty, which happily are giving way to common sense ; and second, to show what constitutes the foundation of the most important improvements in the modern art of war, which are laid down by those great men, and which have been carried to still greater perfection in our own times.

Marching may be reduced to three principles, by which, under various combinations of numbers, men can be brought to move in countless forms, but all their movements still depending on these three elements, *marching...facing...wheeling* ; upon which the whole art of military action depends ; to acquire skill in the application of these principles, should be the first object of him who wishes to become a military man.

Notwithstanding that there is an universal concurrence on the truth of these principles, the means employed to carry them into effect, have been so grossly mistaken, that the application has not been every where the same ; by some they have been totally misunderstood, and by others so varied or incumbered with modifications as to have marred their effect ; or, what is most general, military teachers, either through indifference, or indolence, or the want of a due sense of the importance of attention to the first minute particulars, have begun too far forward ; they have appeared satisfied with *believing they knew* in what the fundamental principles consisted, without ever reducing them to such a state as that the ignorant, by looking at them, could comprehend them. Officers have been content with a general comprehension of what they read, but they have left the application and exemplification to their *drill serjeants* and *corporals*, who seldom know more than

to imitate what they have seen or heard of, and teach them mechanically, but never to exemplify or explain the proper application. Thus while we have had an hundred volumes upon one or another set of *manœuvres*, and governments have issued editions of them, which the compilers themselves did not understand; it was never perceived, that in order to execute great evolutions, and complex and combined manœuvres, much more to carry them into practical use, it was first necessary to learn to *march properly....to face properly....and to wheel properly....* and that all these marchings and wheelings should be executed on the *shortest lines* possible....any of which principles neglected or omitted, or performed improperly, would render any evolution or manœuvre nugatory or ridiculous.

To learn how to do any thing well, we must always keep in mind the end for which the thing is to be done. The intention of discipline is war, or to produce in a body of armed men, such knowledge of a common and uniform mode of movement, in combined numbers, as will give the whole of a large force the same impulse and direction in any manner that may be required by the general, add to this the confidence which every man must feel, in knowing that every man acts in the same way as he does.

The nature of ground, as well as the species of the troops, must render operations in some measure dissimilar; but the perfection of discipline will be found in that system which applies the first simple elements to every variety of circumstance, and enables various bodies, moving in different forms, to preserve still the spirit of the original impulse, and though moving in different directions and arrangements, to move by the same uniform laws of motion.

To render this more distinct, an army of ten thousand men may have to face an enemy in a country where there may be a necessity of throwing the army into three, four, or five separate columns; each having to pass over ground different from the others; or there may be a necessity for forming in order of battle without an opportunity of selecting or making a choice of ground: a good discipline enables the general to move his columns, even when out of his view, with equal certainty, and to make use of such ground as he possesses with effect; while, without a good discipline, neither can be easily accomplished, or it may require too much time to make the necessary dispositions.

CHAP. II.

ALTERATIONS OF THE FRENCH SYSTEM.

THE French system of discipline issued in 1791, has been improved upon several successive times, until the whole has become in effect a new system.

The drill or discipline of the soldier, is more minute and better digested than any other which preceded it ; yet, of the first fourteen pages of which the marching drill consists, more than one half is properly exploded, because experience has discovered that many of the principles of discipline were capable of being executed by more easy and rational methods.

The drill is divided into four parts, in the French system, and each part consists of four lessons. The first teaches the position in single rank, and the motion of the head to right and left ; the second, facing without stepping, that is, turning on one of the heels, as on a pivot, to right, or left, and about ; third, the ordinary step ; and fourth, the oblique step.

There are strong exceptions to this manner of instruction :

First.... After the position is taken in rank, the natural consideration is what a soldier has to do : and as action is his duty, and the action of the legs the first principle ; it is preposterous to teach any thing that is impracticable in action, or unnatural in its operation ; thus facing upon a fixed heel may answer for dancing in a theatre, but it is ridiculous on a parade, and ought to be exploded altogether.

The second part of the drill, contains the manual, and the firing motions, platoon exercise, oblique fire, &c.

Second.... The manual exercise should not be taught until the recruits have gained a tolerable idea of marching in time and wheeling ; of diminishing and augmenting front from the flanks of platoons or sections. Their habits will be brought, by that time, to a familiarity with military motion and command ; and the manual exercise, being itself merely ornamental, and otherwise an useless accomplishment, will be soon and easily acquired, and serve as a relief to more useful exercises.

The third part brings five men together, teaches them to step out in front, and the practice of a variety of kinds of steps....

marching to a flank....principles of alignment, or dressing in line....wheeling and change of direction.

*Third....*This lesson of the French system is premature ; it should be preceded by acquiring the cadence, or marking of time, by the stroke of each foot alternately, and together in time, to the sound of....*one, two....one, two....one, two....*by the officer who has charge of the drill. So soon as they strike time tolerably, they should be faced to the right, and to the left, and to the right about, and to the left about ; and so constantly, until the ear becomes habituated to wait for the word, and not to anticipate, nor to delay after it is given ; until they are completed in this mode of facing, they should not be allowed to advance a step beyond the line upon which they were first formed.

*Fourth....*The lesson in the French discipline of 1791, called the oblique step, is wholly exceptionable, unnatural and useless ; and the moment quick time becomes the time of movement, is *utterly impracticable* ; it is therefore now very properly exploded, and in its place is substituted a more elegant, natural, and useful improvement, that which the French have called the *Line of Science*, and which is accomplished, in practice, by half facing and quarter facing ; meaning thereby, half or quarter of the half circle which a man's vision embraces in a standing position.

The following is an abstract view of this principle taken from the French ; it has not before appeared in English, though the principle has been adopted in practice by several intelligent officers in the British service, who have directed their minds to the discipline of light corps, as *Russel*, and *Cooper* in his "*Practical Guide for the Light Infantry Officer*," published in 1806.

"The received method of wheeling is compared to the turning of a gate upon its hinges, and the term *pivot* has been given to the man on that end of the rank, upon which the others move in circles, each man making a movement upon his particular circle, of which the pivot man is the common centre. While no better mode was devised, and all troops executed their movements in the same way, the disadvantages were equal, but so soon as a better is discovered that must necessarily be adopted:

"Another method of movement is what has been termed marching by the oblique step in which it suffices to say, that it is unnatural and absurd ; that it is impossible for men to march with accuracy, or that ease and self collection which is required

in action, in a position so constrained and tortured ; neither is it adapted for a parade of show, for which it appears to have been originally devised ; nor is it in any manner practicable but at a slow march, and, along with slow marching, must be laid aside. Indeed at the pace of 76, 90, or 120 in a minute, upon a quick march, if there be any obliquity required, the body naturally assumes the entire direction towards the point intended to be reached, and if it be to the right, the right shoulder of every man in succession falls behind the left shoulder of the file to his right ; and so of files marching to the left ; and it is therefore more consistent to determine the movement in the natural form under its proper name, rather than retain an impracticable mode of movement." The movement substituted for this distorted method is called the Line of Science, because it is established on scientific principles, and because it enables troops to move with perfect ease, precision, and celerity, conforming to only the following rules :

1. The men should move in a natural manner, and always in a right line.
2. Every movement should be made to a determined point.
3. Every individual in single, double, or triple ranks, or any deeper order still retaining its form, and moving or displaying to a flank, should march on a distinct and direct line, from the point at which the movement commences, to the point at which it terminates.
4. Every evolution should be executed within a space equal to the front of the body which executes the evolution.

To exemplify to the eye the operation of this simple method, the following diagrams exhibit both methods :

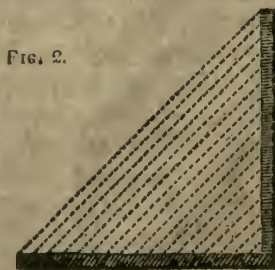
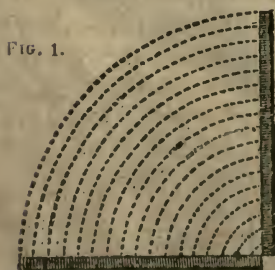


Fig. 1. represents a squad of 16 files front, in two positions. The left or horizontal shaded lines represent the squad as faced from the eye of the reader, and about to receive the following words of command :

Attention the squad.

Take care to wheel upon your right.

Mark time....

By your right....wheel.

The circular lines represent the course which each file must necessarily pursue ; the perpendicular shaded line represents the squad when it has accomplished its wheel upon the right.

Fig. 2, represents the same squad about to accomplish the same purpose of forming upon the right, or perpendicular to the line of its horizontal front ; but to execute the movement in an oblique direction, each file moving upon a distinct but direct line....the words of the drill in this case will be :

Attention the squad.

Take care to form perpendicular to your right.

Mark time.

To the right....half face....march.

The half facing consists of each man so moving his person that his right shoulder shall be placed as he stands, behind the left shoulder of his right hand file ; and that on the word *march*, every man steps off with the left foot, and moves in a direct line to the point at which he is to form, where he fronts and dresses by the files which have preceded him.

CHAP. III.

ON THE MANNER OF CONDUCTING DRILLS.

A GOOD method of instruction in military discipline, should exclude every thing that is unnatural or not applicable to actual military service in action. If any thing be admitted at any time in the parades of show, mounting guard, or the like, it should be taught separately, and after the principles of a rational discipline are well established. Thus, turning on a fixed heel, as is customary in relieving centinels, and facing to the right about on a fixed heel, should not be suffered in the drill, nor until the habit is formed to execute every motion of the body with *moving feet*...but it would be better to abolish it altogether.

A strong exception must be made to the old discipline, in what is called *setting up* the recruit in a stiff position, which is at best unnatural and always unnecessary.

Another exception is to confining the first instruction to one, two or three recruits at a time. The recruits should not be less than twenty, if practicable; fifty are better than ten or fifteen. The men, however awkward, should be formed in one rank as they reach the ground, and taught to form on any required front, and to the left of the first man posted; they should be told to stand perfectly free, to carry their heads erect without being thrown back, and to stand upon their feet so that their weight shall not press wholly upon the heels, but that the heels press lightly on the ground. If the officer, who has charge of their instruction, present in himself a good, erect and easy military figure, his appearance will do more than any verbal instruction; and, as soon as they begin to march, two or more well disciplined commissioned officers, should march to the front, so detached from them, as that their movements and manner may be seen; and they should be careful that all their movements in the presence of recruits, be unconstrained and uniformly correct. Practice, with the object before the eye, saves a vast deal of time, and prevents a great waste of words.

It is too much the practice to commit the charge of the elementary drills to non-commissioned officers, by which many great evils are produced. No officer can expect to be competent to command a company, much less a regiment, (to which every officer should through merit aspire) unless he has had practical experience; and in no circumstance can an officer so soon acquire the habit of command, or learn the mode and effect of discipline, as by personally conducting the drill of 40 to 100 men. By devolving these first duties on non-commissioned officers, the commissioned officers remain *ignorant* or *timid*; and the chance of finding non-commissioned officers, who can clearly comprehend and explain the principles of a good discipline, is not one in twenty; from which cause it is twenty to one that the recruits are imperfectly or erroneously taught.

It is observed by the British general, Dundas, with a degree of truth that cannot be too strongly impressed upon the mind of every man who holds a military commission: "That the complete instruction of an officer, enlarges with his situation, and at last takes in the whole circle of military science: but an officer who cannot thoroughly discipline and exercise the body entrusted to his command, (large or small) is not fit, in time of service, to lead it against an enemy; he cannot be cool and collected, in time of danger; he cannot profit of circumstances, from his inability (to comprehend what is doing by the enemy, or what is necessary to be done against them) to direct it properly; the fate of many depends on his well or ill acquitting himself of his duty: for, it is not sufficient to advance with bravery; it is requisite to possess that degree of intelligence, which should distinguish every officer according to his station: nor will soldiers act with spirit and animation, when they have *no reliance on the capacity of those who conduct them.*"

He, therefore, who has the charge of a drill, or who teaches others, should not be himself ignorant; nor should he be offended at the ignorance of those who never had an opportunity to learn; he should be patient, but firm; generous, but without relaxing from the strictness of duty; he should command his own temper in order to secure respect. Every word should be explained, and a single explanation, or the comprehension of

the explanation by one or a few of those whom he is to teach will not be sufficient....he should never be tired of rendering what he teaches intelligible....every man in the drill should understand every word that is used, and the use of every motion and movement he makes ; and personal actions should be used in explanation wherever practicable ; so that whenever a word is used, or a movement commanded, not only the word shall be familiar to the ear by repeated use and illustration, but the movement itself by frequent practice familiar to the eye.

All drills therefore should be conducted by commissioned officers, who should always keep in mind, that discipline is as necessary for him that teaches, as for those that are taught. He should be careful that he acts personally according to the manner he teaches ; and that all his own motions conform to the principles he gives : he should keep in mind that the soldier very soon discovers the capacity of the officer ; and that unless the officer possesses skill himself, he cannot expect the soldiers to confide in him, nor to respect him ; they may be made to fear his power, but the confidence which is most precious to a good officer, is that which arises out of the voluntary esteem and respect, produced by the generosity of his conduct and the skill which he manifests in the discharge of his duty ; when he treats those over whom he is placed, as men whose happiness and credit he studies, rather than as slaves over whom he has the right to tyrannize.

In some armies, the mind and feelings of the man are never studied ; his passions are never called forth, excepting to excite terror and hatred of his officers ; and there have been men who have held, that the army should be more afraid of their own general than of the enemy ! But we must reprobate such ignorance of human nature. " He who attempts to govern by the lash," said *Timour*, " knows not how to govern." There is no incompatibility in exciting the generous affections of the soldier with the principles of discipline. The celebrated general Lloyd, speaking of the German discipline, reprobates its savage character by observing : " that blows may make a man a coward, but never made a hero." When the officers convince the soldiers that they understand their own duties, the soldiers will respect them ; officers have only to demonstrate that they are the soldiers' friends, and they may lead them to the cannon's mouth

with an enthusiasm that never fails to triumph when regulated by discipline. The triumphs of the French armies, in which no man is ever beaten with a cane, and in which whipping never was known, is all that need be said about the futile barbarity of military punishments, by the lash or by any species of degrading torture.* The humblest bred man who stands in the ranks of an army, is as susceptible of the sentiment of glory, and honor, and shame, as the proudest captain that ever carried a plume.

The ideas of the last century still prevail too much in the military service ; while the British have been gradually, though reluctantly, abandoning their mistakes and errors, to adopt principles which have demonstrated their superiority in practical effects over the whole of the military systems of Europe, too many continue to hug the errors which they have abandoned.

The principle of discipline most prevalent is terror, cruelty, and degradation....The soldier is treated as the outcast of the earth, and however different he may be when he enters the ranks, the manner of his treatment too often transforms him into the miserable slave which he is pre-supposed to be.

This treatment is inconsistent with reason and with humanity. It is not necessary to discipline or subordination. A generous, affectionate, and cherishing courtesy, will overcome the most hardened villain, and where it fails, cruelty or barbarity will never succeed. The line between familiarity and kind conduct is easily drawn by men of sense, conscious of themselves. It is incompetent men alone who will treat a soldier in the ranks with contempt or cruelty. On the parade good temper and good manners should never be absent. Haughtiness is incompatible with true dignity ; openness, generosity, and firmness, constitute the true deportment which inspires respect without exciting fear, which commands with decision, and is obeyed implicitly ; and which is inflexible only in the discharge of duty.

The instructor of a drill should be of a cheerful but firm disposition, more disposed to laugh at the rude mistakes of the first drills, than to use opprobrious language : he must have discernment and good sense, to know that as the habits of men

* The author has the satisfaction to say, that since the first edition of this work was issued, whipping has been eradicated from the American military penal code.

newly entering upon military exercises, have been formed differently, that they must be expected not to change their habits suddenly, or embrace habits at once different from those they have been accustomed to.

It should be explained that the first lessons of the *marking time*, the *face*, *facing*, and *wheeling*, are only like the first lessons in reading and writing; that it is requisite to practise them often, and to perform them with the greatest exactness, in the first beginnings, in order to carry the same correctness and exactness into more enlarged practice.

That the duties of a company are the same as the duties of a regiment and of a whole army....that the whole of the military art consists in *marching*, *facing*, and *wheeling*, according to the rules which experience has proved to be the most effective; and that without perfection in these particulars, arms would be of little or no use, opposed to troops who are well disciplined. These instructions should be introduced in familiar and persuasive language, as advice rather than command; always with good temper and kindness....*abuse never!*

His words of command should be clear, sufficiently loud to be distinctly heard, and of a full round sound, rather than in a deep or shrill voice.

The advantages and security of a good discipline should be constantly brought into view; the strength of compact lines and columns, and the necessity of marching correctly, over equal spaces in equal times, should be hinted at as being the means by which the whole power and strength of a line or column are brought to bear at the same instant.

He should, before any thing is begun, take pains to explain what is intended to be done, and how it is to be done, particularly in the beginning; it may be less necessary as he advances; and when any thing is to be performed of which their understanding may be doubtful, his explanation should be repeated.

In the manner of command, much depends upon the clearness and distinctness of the utterance of him who teaches. At drill he must not be sparing of explanation....but on parade he gives no instruction, he only commands, and sees that what he orders be executed properly.

No opportunity should be lost that is practicable to present to the eye of the soldier the manner of any operation which he is

to perform ; well disciplined men presented in front, whose actions may accord with the command, and who may be seen by the whole of the men at drill, will have an excellent effect in producing a ready understanding ; it is much easier to imitate what is seen than to execute what is barely described ; the variety of habits, and the difference of the meaning of the same words in the understanding of different persons, render verbal description too generally insufficient. There can be no mistake by the eye, and every word should be explained which may not be otherwise understood.

The intention of all discipline is to supply a kind of artificial instinct, and to make this uniform throughout the whole mass of an army, so that whenever any operation is required to be performed by an army, no more is requisite than to assign stations to the several divisions, and appoint the time when the movements commence, or when the concert of operations should meet and produce the effect required.

To discipline men well, there must be a familiar, comprehensible, and rational method.

The more simple it is, the more easily it is understood, the better will it be executed.

To this end, the language must be that of the science, and it must be taught and explained with clearness.

There must be nothing unnecessary nor unnatural in the system ; every operation and movement should be executed exactly as required ; in the shortest period of time, and over the shortest possible space that it can be accomplished.

All good discipline begins with learning to *march in time*, and to a *given place*, and every man, from the private to the general, acting by principles of movement equally well known to them all, there must be reciprocal knowledge and reciprocal confidence. The general will know in what time and order every division can reach a required point ; satisfied that they are disciplined, he will know that the men can accomplish with certainty what he has designed, upon the foundation of their discipline ; and therein all obtain an assurance of security and power ; to assure a like confidence, the soldier must know, that the officer who commands him, is himself competently disciplined, and capable of discharging his duty.

As all discipline is intended for action, and not for parade, discipline should be directed to inculcate that which is adapted to action only, as fundamental, and to make all that appertains to parade, secondary....action must never be lost sight of in teaching discipline.

Slow time must never be spoken of or heard on the parade for discipline....marching must be taught at quick time, or the time of a gay cotillion or country dance; and the men who compose the drill must be taught to *mark time* in rank, and to go through their facings, before they are permitted to march a single pace from the line on which they are first dressed.

In conducting the drill, so soon as the evolutions are begun, they should constantly vary; that is, the evolutions should never succeed each other in the same order any two times; the drill should one day move from the right, another from the left, and so on, always different evolutions; by this means the soldier will never know what movement is to follow any other, and his attention will be constantly engaged to the words and their meaning: the contrary practice is too prevalent, and the practice of what is called the *nineteen manœuvres*, is held as the consummation of military perfection; when in fact, a well disciplined soldier may never have seen a single one of these manœuvres, and yet perform them or any other, at the first word of command. This course obviously begets the habit of attention, and is strictly analogous to the uncertainty of military action.

It may be proper to remark here, for the information of those who are not already conversant in the subject; that many of the words of instruction, direction, and precaution, employed in the drill, cease to be employed when the battalion is completed in its discipline. As in common reading the names of the letters of the alphabet are not repeated, yet their powers are employed exactly as in the first instructions to read; or, as in music, the notes have names, these names are not employed in the practice or performance of music; so it is in military discipline.... numerous words and commands are used in the elementary instruction, which are no longer required to be employed, though their application and their practical use are never to be omitted; of this description are the commands, *mark time*....by the *side step to the right*....or to the *left*, &c.

CHAP. IV.

OF WORDS OF COMMAND AND OTHER MILITARY TERMS.

THE commands consist of general and precautionary directions or information, concerning what is required or intended to be performed; and these are of several kinds....they are general, particular, precautionary, auxiliary, of direction, and of execution.

Commands are particular when they declare the act or motion to be performed, and these are distinguished into two sorts of words....thus, *right...face*....the word *right* commands the thing to be done....the word *face* is called the word of *execution*, because the motion must not be performed until the last word is given, and because it remains yet unknown whether the word to follow *right*....is *face* or *wheel*, and which ever it is, must be executed.

They are general, when the whole of the evolution or movement designed to be executed is expressed, as....*Take care to form column*....or, *take care to display the column*.

Precautionary words of the drill are....*Dress*....*Attention*!

Auxiliary words are *march*, at the close of a word of command, when it becomes also a word of execution; so are the words, *forward*, *cover*, *dress*, *mark time*, &c.

They are directory, when they direct how a thing is to be done, as in wheeling to the right, the right hand file is directed to *stand fast*; so the words, *right*, *left*, *forward*, are both directory and executory.

Many other words are also words of execution; but in the drill it is specially applied to the last of the words of command, thus, *right...face*; the word *right* is the word indicating the direction of the motion, the word *face* determines the *act* and *time* of its execution. *Halt* is a word of execution.

Dress is a word of parade, intended to direct the troops to form with exactness in a straight line to the front.

THE DRILL answers to the word *School*, it is there the exercises are commenced and the first elements of military motion taught.

PLATOON originally signified any collection of persons on a small space of ground....it has been used to signify a limited number of men in military order, and is still used instead of company; the word company being used in an administrative sense, and the platoon in the strictly military or disciplinary sense. It is derived from the French *peleton*. In the battalion exercises, the platoon consists usually of the front of a company in whatever order of depth. When the companies are strong, they are sometimes divided into half platoons, and the half companies are then likewise called platoons. Companies are often not sufficiently full, and then platoons are formed according to the orders of the commander, so as to place under the command of an officer so many as he may effectually command in action.

A COMPANY....A body of men such as one man may command with facility, aided by subalterns; the proper number of a company is 100 men; so that a *company* and a *Roman century* would agree in number; and the rank of *centurion* and *captain* would be the same. There should be an officer specially for every 25 men, so that there should be 3 subalterns; and there should be for every fourth of a company, one sergeant and two corporals. The Romans had an inferior officer for every 10 men.

The number of a company may vary in a regiment on the peace and war establishment.

SQUAD is an abridgement of the word squadron, or the French *escadron*, and is now used to signify any small body of men detached upon ordinary duties, such as drills and fatigue.

FILE....A company of 100 men placed in a rank standing side by side, presents an hundred files; the same company in the order of *two deep*, or two ranks, presents only 50 files; if placed three deep, then it presents 33 files, and a broken file of one man. Whatever be the depth, that is, if the parade be drawn up in 2, 3, 4, 5, or even 10 ranks, the whole of the men behind the front rank man, form but one file; and so behind every man in the front rank, there are files only in equal numbers to the front rank.

INDIAN FILE....a single rank placed so that every man stands successively in the rear of the rest.

RANK AND FILE....signifies every man who carries and uses arms in action, so that the corporals always, and sometimes the sergeants, are comprehended in the rank and file.

SUPERNUMERARY RANK, is the rank composed of officers and non-commissioned officers, 4 paces in the rear of the rear rank of the company....their duty is to attend to the good and close order of the ranks....and to attend to the disabled in action.

A **RANK** is any number of men placed side by side, upon the same front, and in a straight line. When there are two men, one behind the other, and this is continued from right to left, then it is, according to its composition, said to be a squad, platoon, company, or battalion, in two ranks, or two deep, or the depth of two men, or double files, or of the double order.

SECTION means any portion cut off, or a small division of a large body....thus, any plural number, two files or more, may be called a section of a rank, two are called a double file....three men also may be called a triple file....but it will then only signify the same as *two deep*, or *three deep*; sections are named by the number of their front....and although the number may be one, two, three, or four ranks, still the sections will count only by the front rank....so that there may be sections of 3, 4, 5, 6, or any number less than half of a superior division of the company....thus a company may, instead of being exercised in a platoon, be formed into half platoons....then each of the half platoons may be divided into sections according to its strength.

In military language it is a species of sub-division of a rank into equal parts, as a section of two is a section of the half of four, and three is a section of the half of six, or the third of nine, or the fourth of twelve, or the fifth of fifteen, and so on; it is a section of files counted by the number of men in front, whatever may be the depth; so that when the word of precaution is given to a squad, platoon, or company, to take care to advance by sections from the right; it matters not whether there be only one, or two, or three, or five ranks, the whole of the depth of the ranks which cover the men in the front rank, form parts of the files, and preserve the order of their files.

All these terms are used on the drill, occasionally the *squad* may be called a *platoon* or *company*. The file is the man in the front rank, and every man behind him is of the first file; but face them to the right, and the first file then becomes the first rank or section of the column; while if they are fronted again, the file is no longer a section; if the front rank be told off in sections of any number, then whatever be the depth, they be-

long to that section whatever may be the movements made, until that disposition or order is changed.

A **BATTALION** should consist of as many companies as may be governed and put in motion for battle by the means of a staff of two, three, or more superior field officers and one subaltern field officer; that is a colonel, lieutenant colonel, major, and adjutant.

A **REGIMENT** may be composed of one or more battalions, under the command of a colonel; the original signification of the word colonel was the leader or commander of a *column*.

A **BRIGADE** may be composed of two or more regiments or battalions; commanded by a general of brigade. A brigade on the peace establishment may consist of any number of battalions; but for military service in the field, the brigade should not exceed 4000 men.

A **DIVISION** is composed of two or more brigades under a major general and his staff; a division may consist of any number from two to four brigades.

IN LINE, battalions form with an interval of 12 to 16 paces; which is occupied by two field pieces: sometimes the interval is enlarged to admit larger batteries of 4, 8, or 12 pieces of artillery in line at given points.

DISCIPLINE is the mechanical part of the art of war; it determines the habits of men to certain rules of action, applicable to the motion of men and the use of arms; in an enlarged sense, discipline regulates the conduct of troops in camp and quarters; and a good discipline implies the existence of a well defined and exact subordination, with a complete knowledge of military duties in the field.

EXERCISE has two significations; the practice of marching and executing evolutions and manœuvres; and the practice of the use of arms, whether the firelock, cannon, or sword, which are acquired by exercise at the drill.

ORDER OF DEPTH...the order of depth is understood to relate to a line drawn from the front to the rear as far as it goes, and that is the depth; the order of depth of the Grecian phalanx was 16; the depth of battalion was in Europe at one period 12; Gustavus Adolphus reduced it to 5; the prevailing order in Europe is now 3 *deep*; but that order is not strong enough to make the charge, or to receive the shock, without a reserve...the third rank in line should not fire, it should load for the centre rank.

OPEN ORDER is when the ranks are two paces or more asunder....this is the order of parade and inspection.

CLOSE ORDER is when the ranks are one pace asunder....this is the habitual order of action and movement in all exercises that resemble action.

PACE....the step or pace should never exceed 24 inches....any augmentation of speed should proceed from the quickness of the march, or a greater number of paces in a given time.

ACCELERATED PACE is the quickening from the ordinary speed of 76 or 90 in a minute to 120 paces in a minute.

MARCHING is moving in equal paces at equal times.

STEPS....there are various steps in use, but good sense has exploded all that were unnatural. The steps retained are the common pace of 24 inches, and 79 in a minute....the *short step*, used in wheeling ; when the moving flank only steps 24 inches, and the length of pace of all the rest of the files diminish in length successively from the moving flank to the pivot ; the *side step*, necessary for formation and dressing ; *marking time*, is the bare raising of the feet in musical time, without moving from the ground.

The steps abolished are the *oblique step*, the *lock step*, or *de-floy step*, all of which are found to be totally superfluous : the backward step may be said to be abolished as to every other use but dressing in rank, there being now no backward wheeling.

COUNTERMARCH....this means when one flank by marching exchanges place with the opposite flank....countermarching may be executed by files, sections, platoons, or battalions : in the front of an enemy there must be no countermarching of greater extent than a platoon.

EVOLUTIONS signify the evolving or opening of the determined parts which compose a battalion, regiment, brigade, or the line of an army. The word evolution implies a single movement or manner of movement, of the component parts of the body moved.

MANŒUVRES are composed of a variety of evolutions, performed at the same time, or at distant times and points, for a common purpose ; so that a manœuvre consists of the application of various kinds of evolutions to one purpose. Different parts of the same army may execute different manœuvres.

DEPLOY... DISPLAY...the same sense, signifying the unfolding of a body of men in deep order and extending them in a lengthened order or *alignment*.

Pivots are fixed or moveable ; the term is derived from a point or post turned upon ; when fixed, the man who forms the pivot does not move from the ground, but turns upon it ; when moveable, the man who is the pivot moves in the direction best adapted to effect the movement with accuracy and precision in the least required time.

FLANK...this term signifies the extreme of a body or rank formed for military purposes ; it is simply the extremes or ends of a rank or line ; thus a battalion formed in the order of battle, its left end is called its left flank ; and its right end, its right flank ; so in whatever order a military body is formed, the sides are the flanks. The *right* is generally understood in discipline to imply the *reverse flank*, in opposition to the *established flank* or left, all movements being presumed to be made upon the left as the pivot flank. This rule is going out of use, and ought to be abolished, as the principles of disposition forbid any determinate rule for the violation of which there is a necessity ; moving with the right in front, and ordered to form to the right of the pivot, the principle of a reversed flank is totally destroyed, for the right becomes the pivot and the left the reverse flank.

ALIGNMENT is the formation of the line, or the junction of two or more bodies of troops in a common line ; which is called the *alignment*.

LINE...an army formed in the order of battle is said to be formed in line of battle ; but the order of battle may be composed of several lines, two, three, and even four lines. The charge is generally made in line, the reason of which is, that the impulse or shock may be simultaneous, or the same every where at the same moment. The term is derived from the analogy of a line formed by their front, but the order is not always a straight line ; the nature of the ground may prevent the arrangement in a straight line ; the line may therefore be curved as well as straight. The term line is also applied in several ways....thus, an officer in the army is said to be an officer of the line, contradistinguished from an officer of the militia ; the line is understood to express the order in which a brigade or any greater number of battalions is formed ; but is never applied singly to a regiment,

though a regiment may be described as formed according to the *line of battle*, implying that the officers are posted in the same way as if prepared for battle.

SECOND LINE in the order of battle...the second line is sometimes stronger in numbers, sometimes weaker, than the first or front line. Second lines are often composed of distinct columns destined to move without relation to each other.

LINE OF THE ORDER OF BATTLE are usually from 200 to 300 yards apart. Lines are divided sometimes into wings, as right and left, without any centre; at other times with a centre equal in number to either of the wings.

THE LINE is composed also of divisions, which are again composed of brigades, and the brigades of regiments or battalions: and each part of the line is composed of one or more of these parts.

ARMY...the whole of the military force collected for the purposes of war, and consisting of all the different kinds of troops.

COLUMN...when the depth of a military body is greater than its front, it is said to be formed in column; the column is the most certain lever in the hands of a skilful general for moving an army, and presenting his force with celerity on any side, either in the deep order, divided into small columns, or into great close columns, or displaying into the extended order. All manœuvres of close columns should as much as possible be executed upon the centre.

Folard's column is fixed at any number from 25 to 40 in front, but not less.

OPEN COLUMN...when the parts of a column are distant from each other to an extent equal to the front, or at wheeling distance, it is called an open column, or in open order, and the officers or covering rank are then in the interval.

CLOSE COLUMN...when the parts of a column are only a pace or two paces distant, it is called close column: the field officers are then on the flank, upon which they are to move; but the captain and all platoon officers should in all circumstances be on the *right* front rank of the company or platoon.

ECHELLON, from *echelle*, stairs....a battalion is formed in echelon in various modes....by wheeling companies a given number of paces less than their front on the right or left, they form an echelon of companies; if upon the right they form an

echellon right in front while so wheeled ; wheeled upon the left, an echellon, left in front while so wheeled ; these are echellons in the oblique order. To form echellons in the perpendicular order, the right companies may be advanced successively to the front, each to a distance equal to the length of its front, they will then form perpendicular echellons, the left only retaining its position ; so if the left advance, the right may retain its position ; in like manner the centre may be advanced and the flanks held back ; or the centre held back and the flanks advanced.

TACTICS comprehends the whole science of war ; it consists of two branches, the first elementary or disciplinary and mechanical, appertaining to the duties to be performed : the second the more enlarged duties to be *commanded*, which comprehends the first, together with a knowlege of the *coup d'œil* ; the first belongs to the movements from a company to a division ; the second belongs to the movements of a whole army. Armies are put in military movement according to certain rules of discipline, which must be uniform and exact throughout the whole of an army.

Oblique movement.... This signifies the movement upon lines oblique to the actual point of a line of parade ; the movement of a rank forwards would be perpendicular or direct ; the oblique requires that each man be faced to the right or left as may be required, by the word *quarter face* or *half face*, and the squad being then moved, each man moves in a line oblique to the original line of the rank.

Diagonal movement, is the movement of any body in entire rank, after being quarter or half wheeled.

Diminishing and augmenting front.... this consists of taking from one flank a given number of files, and adding them to the next section in the rear ; or taking from a rear and adding to a front. All augmentations or diminishing in battalion should be made by *even numbers* of files, as *two, four* ; and in drill and evolutions, where practicable.

CHAP. V.

THE ORDER OF INSTRUCTION.

THE FIRST DRILL.

THIS will consist, first, in forming with the tallest men on the right, diminishing successively to the left, and dressing ; which must be executed without any stiffness or turning of the head ; but wholly by the glance of the eyes.

The second process will be teaching to mark time.

The third will be facing to the *right* or *left* side, and *about*, as commanded, always with a raised and moving foot.

The fourth, of ranking and sizing, or reducing the rank to the order of the tallest men on the extremes or flanks, and the smallest men to the centre.

THE SECOND DRILL.

This commences the marching, and teaches the rank to step off in paces of two feet, with a bent knee, at 76 and then at 90 paces in a minute. The pace of 120 in a minute is not to be taught till the discipline of the company is commenced.

The first mode, is marching to a front direct, facing and wheeling upon right lines and angles. This must be perfectly taught in single rank ; and the whole must be marched and wheeled in single or Indian file, before any modification of the movements takes place.

THE THIRD DRILL.

The operations of this drill, consist in marching in more than single file, and this will combine three other important branches of discipline.

First....telling off into double files, and into sections of any required number at command.

Second....marching and wheeling in the order of those files and sections.

Third....augmenting or diminishing the number of the files or sections during the march, and in the wheelings.

THE FOURTH DRILL.

The movements in single rank in this drill, should commence with marching forward in a rank well dressed ; then facing the rank to the right, and moving forward in single or Indian file, at 90 paces in the minute ; the rank may then be wheeled in this order to the right, and to the left, and to the right about, in line and in single files, marking time, and going round at a regular cadenced pace in every instance. The rank should be marched then back to the original ground, faced to the left, and marched off again, and put through wheelings in every direction ; never following the same routine, but throughout the whole course of the drills, always varying the circumstances of each succeeding facing or wheeling....When brought to the parade again, the rank should be kept at marked time, until well dressed, and then *halted*.

From the first movement on parade, which should always be preceded by the word *attention*....and begin with the word...*mark time* ; the feet should preserve their uniform cadence, without intermission, until the word *halt* is given ; after which, no evolutions should be commenced, without the prelude of *attention*, and the auxiliary word of movement....*mark time*.

PIVOTS AND GUIDES.

In this stage of the instruction, guides are to be introduced ; at first, by well drilled men or non-commissioned officers, placed, for the purpose, on alternate flanks ; by these will be shown the principles of wheeling upon a pivot, and of facing pivots, at the *cautionary* word....while the rest of the rank, who are not pivots, wait for the second, or word of execution : as, for example, the word being given to a rank drawn up, BY THE RIGHTFACE ; the man on the right of the rank is the pivot, and at the word....*right*, he faces to the right, while the rest of the rank continue at marking time until the word...*face* is given, when they turn in the same direction. This principle extends to both facing and wheeling, in rank and on the march ; and through every operation of wheeling, whether of files or battalions, the pivot always takes the direction signified by the word of precaution....and the rest of the rank, section, platoon, or battalion, wait for the word of execution.

The correctness of the movements, the regularity of the wheelings, and their exactness and precision, greatly depend on the instructions and explanations given by the officer who has charge of the drill, and by his constant attention to the use of the pivots ; which is the more necessary in this stage of exercise because the principle is extended to the moveable *guides of evolution* in a more advanced stage of discipline....which consists only of placing men well disciplined on the *advancing flank*, or outer flank, or as it is called, the reversed flank, in a wheel....while the *pivot* is on what is called in common wheeling, the standing flank, or inner flank.

THE FIFTH DRILL.

As soon as the squad can march and wheel with correctness, the firelock is introduced ; and the manual exercise taught : this is very soon acquired ; but the greatest attention must be bestowed in teaching the firing motions minutely, exactly, and frequently : every act that must be performed in a real loading and firing, should be executed with studied exactness, counting each motion and allowing a second of time to pass between every motion. This may appear tedious at first, but the formation of the habit to exactness will repay the pains bestowed on it.

THE SIXTH DRILL.

After direct marching and wheeling are well practised in single rank, and all the practicable variety of movements executed, which example and ingenuity, aided by patience and good temper, can contrive and employ, to give the rank of the drill an early facility in evolutions, and a sufficient understanding of them ; then the most important branch of modern improvements is introduced.

OBLIQUE MOVEMENTS.

This is the oblique movement, expressed by the French military writers of the revolutionary period, under the name of the *Line of Science* ; in the latter systems ; expressed *demi à gauche*, half-left....*un quart d'à-droit*, a quarter face to the right, or a quarter face to the left. It is the constant method of augmenting front, and reducing the front of platoons or sections, in passing the defile or obstacle ; it is the uniform method of the light troops ; and is frequently denominated the loose order of formation.

This principle should be commenced as a new drill, and the men should be so informed ; the direct, or perpendicular movements, should be now introduced as sparingly as possible, and only to give opportunities for practising the oblique movements. They should commence with single ranks, and half facing only ; as quarter facing is, for a single man, not so easily distinguishable ; though, when extended to four men in front or more, it becomes of great consequence ; so that, in the facing of single men, half facing only is to be used ; half and quarter facing come into use, when the movements in sections of any number beyond two men are required.

The objects and uses of this improvement, are to produce flexibility, with compactness, order, and accuracy ; to save time in performing evolutions ; to shorten the space, diminish the labor, and prevent unnecessary fatigue ; objects which call for the constant care of a judicious officer on actual service ; it is not to save time, or trouble, or fatigue, on the parade or drill, but to be able to execute in a less time than by the ordinary method, the same and better evolutions. The detail of these oblique movements, must be first commenced with half facing to the right, and then fronting....half facing to the left, and then fronting....then facing to the right direct, and half facing to the left ; which will bring the rank into the same position as when first half faced to the right ; these half facings should be varied in every direction, right and left, front and rear. Never forgetting that the whole of these facings must be performed with *moving feet*, and at *marked time*.

The French discriminate between *oblique* and diagonal movements ; the *oblique* now means the movement of each individual upon a distinct line ; the *diagonal* movement is that of a whole rank, as a movement by echelon of companies to the right or left, after a *quarter wheel* of companies.

The principles of the oblique line, or line of science, should next be extended to two men ; the rank should be told off by the voices of the men....*one, two....one, two* ; from right to left ; and the men should be informed, that in half wheeling to the right, the right hand men, or those who counted *one* in each file, are to be the pivots ; that wheeling half to the right, is only the extension of the principle of half facing from one man to two men, in which the pivot should act as in half facing, and

face at the word of *command* ; while the second man of each, or those who counted *two*, should wait for the word of *execution*, and step out at one pace, inclining his face to the right, bringing up his right foot and marking time, and dressing by the pivot, so that the whole rank would then present a series of double files, half wheeled to the right ; they might then be further half wheeled to the right, which would bring them into a column of double files, the right in front ; they might then be half wheeled to the left, in which case, the men who counted *two*, should be apprised that they become the pivots and must half face at the word of *command*....and are again half wheeled to the left. It would be then perceived, whether they had wheeled accurately, or not, as the rank would be well or ill dressed, or if the wheeling was well or ill executed.

These principles should progress to three, four, five, and up to ten or twelve men in front ; half faced and wheeled, upon the same principles ; and when in that position, half wheeled, they should be told, that they were then in the position called the *echelon*, a word which signifies steps of stairs, which the outline of their formation represents ; and that this order of the echelon is susceptible of the greatest uses and application to an infinite variety of modes of formation.

In this position, they should learn that movements of every kind are to be executed by the time of the ordinary or quick marching pace ; that the moving flank, or guide, of every rank, must march only twenty-four inches, and that the intermediary files must shorten their paces, so as to dress, and always dress by the moving flank, touching the file on the side upon which they move, and looking to the moving flank ; that, when wheeling upon the left, the left hand man is the pivot, and the left arm is to be bent so as never to lose the touch of the left hand man, while the eye is turned in the opposite direction upon the moving flank ; so that the touch being always kept, without too much pressure, there is no danger of breaking or bellying out the rank on that side ; and by looking at the moving flank, and never advancing beyond it, but shortening the pace in proportion as the man is near the pivot, the evolution is always executed with exactness and beauty.

These elementary principles, so far well taught, and understood in their application to the theory, all the supposed complexity of military evolutions and manœuvres begins to disappear. The principles of marching thus far unravelled, the application which succeeds consists only of modifications of these principles, and their use in producing combinations of movements adapted to numbers ; to the proposed object of the movement ; and to the circumstances of the ground.

THE SEVENTH DRILL.

The next process of the drill will be that of carrying into effectual exercise, the same direct and oblique movements with double ranks : when assembled on parade, the whole drill forms in single rank, the tallest men on the right. The commander of the drill, or an assistant, takes care that the formation be exact ; and as soon as formed, the men must not be permitted to remain in that position too long.

The rank which is thus formed, will be brought to *mark time*, and by the wheeling of the *even* files upon the right, or odd files, and countermarching the front rank or even files, throw the series of tallest men alternately to the right and left. To bring the whole to that order by which the tallest men shall be on the flanks of both ranks, and those of the rear rank taller than those of the front ; this method must be pursued. The files tell off as usual by the voices of the men....*one, two....one, two....*the number of files being found, say 36 men compose the rank ; the officer will give the precautionary information and explain the object, and he will tell them that the 18th file is the left of the first or right section of the rank, and that the odd files of that section will be the pivots ; that the 19th to the 30th file form the second section of the rank, and that the *even files* of that section will form the pivots ; that the second or left section will wheel upon its left or even files : that the first or right section will wheel upon its right or odd files. He will then give the words of precaution :

Attention.

TAKE CARE TO FORM DOUBLE FILES, BY WHEELING
OUTWARD FROM THE CENTRE.

Mark time.

Double files....from the centre....outward wheel.

They are then brought to their proper distance by either of two modes, and both modes should be practised. The first mode is by the words,

Front face....by the side step to the centre, to the right, or, to the left....incline.

Or, as the right section will have been already faced to the right, the words will be given....

Left section to the right about....face.

In close order....cover.

Front face.

Should it be more eligible, from the nature of the position, that the formation should be made to the left, then the right section may be faced to the right about, dressed, closed, and fronted in that form. They are thus ranked and sized by evolution, a method preferable to the common mountebank tricks by which men are made to skip backward and forward, and to the front and to the rear: exercises totally unfit for soldiers, and inconsistent with military utility. Nor should any thing be admitted in discipline, which is ridiculous, contrary to reason, or without utility.

To prepare for evolutions, the first principles of the drill, for moving in sections, countermarching, and wheeling in all directions, and several sections, each section in different directions, will be commenced.

THE EIGHTH DRILL.

This drill carries into effect the movements direct and oblique for the whole company; and extends the practice of a variety of evolutions in single and double ranks.

Throughout these drills it may be perceived that the movements are progressive, from something easy, to something a little different, but all performed upon the same principles; the officer in charge of the drill will keep in mind, that though the steps of instruction are progressive, the exercises should constantly vary as soon as a little progress is made, so that the attention be always kept awake.

And it must be kept in mind, that this distribution of the drill into six classes, has reference only to the stages of discipline, the degrees by which the soldier is taught: the following chapters are divided into sections for the purpose of reference.

CHAP. VI.

THE PRACTICAL DRILL.

§ 1. **AFTER** the drums have beaten, and the hour appointed for parade has arrived, the officer who has charge of the drill, attended by one or two non-commissioned officers, having come upon the ground; the officer either gives the word to **FALL IN**or it is executed at the beat of the drum.

The recruit should not be put under restraint....he should stand in the easiest position for himself, with his feet neither too near nor too distant, his whole weight balancing on the balls of his feet, and without pressing upon his heels, his eyes to the front, and face erect; his hands suspended without restraint or stiffness by his side, without being pressed too close, or fingers extended on his thighs: the palms of his hands in the direction of his thighs, so that the middle fingers may fall about the seams of his pantaloons, his body equally presented to the front; his knees straight but not stiff, and his shoulders neither thrown too much back, nor raised by constraining the arms, nor pressed forward; but so easy that the respiration be perfectly free.

The rule of the drill should be, that the whole form one rank, the tallest men take their ground on the right, and so in succession to the left. One or two non-commissioned officers go to the rear and correct any errors which the men may themselves make on falling in, this operation is called **SIZING**; to bring them to the proper position for exercise, the tallest men must be on the right and left of the rank, and the smallest successively to the centre. There are various methods of sizing, but that which is executed with greatest celerity, and in the manner best adapted to familiarise the men with military movements, is to be preferred. To effect this, therefore, the following words of command are given, and they are executed according to the method here prescribed.

The officer of the drill having taken his position from ten to twenty paces in front, and faced towards the rank, which is now supposed to stand with the tallest men on the right : he gives the general precautionary word :

Attention.

On this word the whole rank stand erect, with their eyes thrown to the front, without any motion or noise....in this position :



The officer who has charge of the drill will then give his precautionary instructions to the following effect :

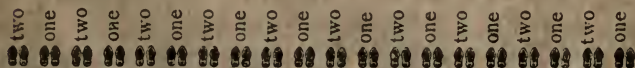
The squad is now so formed that the tallest men are on the right, and the smallest on the left ; it is next to be disposed so that the tallest men shall be on the right and left of the rank, and the lowest men in the centre.

This is to be done by ranking and sizing. To effect this the rank will be told off in odd and even files, by the right hand man calling out ONE, the second man TWO, and the third man ONE, the fourth man TWO ; and continued to the left, so that the whole shall consist of files one and two, or odd and even files, when they are told off from right to left.

THE SQUAD WILL TAKE CARE TO TELL OFF BY DOUBLE FILES.

Tell off.

The first man tells *one*, the second *two*, and so on to the left, in the following order :



The company (platoon or squad) are next to form double files faced to the right ; the front rank will then be faced to the right about and countermarched upon the left of the rear rank ; while the files composing the rank who have called one, move up to the right hand file, still facing to the right.

But in this instance, as in all others, when movements are to be made, every movement must be preceded by the order to *mark time*.

This operation consists of an alternate raising of the feet. The left foot is raised about four inches from the ground slowly, and brought down quick, and the right raised to the same height as the left, strikes the ground; thus alternately, striking the ground in *given times*; whence it is called marking time; and the officer of the drill will count with the rising of the left foot, *one, two....one, two....one, two....*until he thinks the ear and the feet of the men have found an agreement in the time.

When he has succeeded in this, he gives the precautionary instruction :

TAKE CARE TO FORM DOUBLE FILES, WHEELING BY
YOUR RIGHT ON THE ODD FILES.


The odd files on the *first word* will face to the right.
The second or even files will wait for the *second word*.

THE WHOLE WILL TAKE CARE TO MARK TIME.

Mark time....one, two....one, two.

Right....wheel.

The squad will present the following positions on the first word....RIGHT....

2 1 2 1 2 1 2 1 2 1 2 1 2 1 2 1 2 1 2 1


On the second word....*wheel*....the squad will present the following disposition :




The even files now form the front rank, and it being the object to bring them all into one rank, the front rank must be countermarched, by the following words :

Even files....right about....face.

Upon the left countermarch....march.

They will then move, and exhibit the following movement :

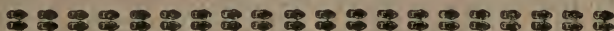



The odd files here move into close order on the front file, the even files countermarch on the left of the odd files.

The tallest men are on the right, and so diminishing in height from right to left, by taking each alternate, or every second man, and carrying them in progression to the left, the tallest man is thus placed on the right, the next tallest on the left, and so diminishing to the centre.

The officer will now give the precautionary instruction to form and cover well; and as they are to form a rank faced to the front....he will then give the word :

Cover.



By this word is intended that the men in succession from the head of the rank, should cover the space from the first to the last man in a direct line; each man looking directly at the back of the head of the man before him. It must be kept in mind, that the whole of this drill must be performed at *marked time*, and that attention must be constantly paid to this, and no motion begun until the time be well kept in the motion that has been last ordered.

The officer will then give the word :

Front face.



The whole having assumed this position, without any movement of the head, now look to the right, and dress by the right hand man.

This being accomplished in the first few drills, it may be proper to accustom them to cease moving their feet, in order to bring them to a correct movement from the first step together; this is done by the word

Halt.

§ 2. But after a few drills, there should be no halt, until a considerable number of marches or evolutions shall have been executed.

The first movement, after being thus halted in the first drills, is again signified by the word of precaution.

Attention.

TAKE CARE TO FACE TO THE RIGHT.

This is simply intimating what is intended to be done ; the recruit must be told that he is not to execute this command, until he hears the word *face*, that there will be a pause between the words *right*...and *face*, but that, until the word *face* be uttered, the position must not be altered.

Mark time.

The feet, beginning with the left, are alternately lifted at *one*, *two*...*one*, *two*.

Right...face.

On the word *face*, the left foot is lifted briskly, and the toe of that foot turned in a short curved step towards the right side ; the right foot is briskly turned in the same direction, and the body comes round with the direction of the right at the third short stroke of the left foot ; when the rank will stand in Indian file, in the following position ; and if the rank be not exactly straight, the officer will give the word....*dress*...or

Cover.

The next movement, is the same word of command, *right face*, repeated, intended to bring the rank with their faces to the rear. Care is to be taken that they mark time correctly ; and they must be apprized, that the turning commences with the left foot, and that the word *right*, is not to be the signal for facing, but the word which follows it...that the first word *commands* or *tells* what is to be done ; and the second word is the word of *execution*...the word is then given, and they present the following position :

Right face.

They are kept at marked time, and dressed in this position ; that is, faced to the rear from their first position ; they are again faced to the right, and present this position :

Right face.

They will be exercised in the same manner in facing to the *front*, when they may, instead of the word *right face*, receive the word *front face* ; by which they will be placed in their first position ; and they will then be faced to the left in like manner three successive times, by which they gain their first position faced to the front.

§ 3. The facings must be repeated frequently, and the officer of the drill will find his labor in the progress much easier, if he will not be sparing of pains in these first facings : after they have faced to the right several times successively, and executed it well, they are to be faced to the left until they face together at the word ; they should be then faced to right and left alternately and often ; and only then they should proceed to

Right about...face.

This consists in carrying the body round by its right side, to the opposite position, or about. The men must be told that they must not attempt to move about until the word *face* is given, nor to move like a block upon an axis ; they must use their legs : then the left foot is raised and takes a larger course than in simple facing ; the right foot turns in the same direction, and the third step or the second stroke of the left foot is made when the body is faced exactly right about....it must be executed in three steps....and the drill officer, if the facing is not well executed, must bring them repeatedly about....telling *one, two, three....one, two, three....* these numbers answering to the first step with the left, the second with the right, and the third with the left. They may be occasionally exercised in simple facing right and left, and right and left about, for the purpose of accustoming them to wait for the word ; as recruits are too apt to be confused, and especially when discouraged by ill nature or moroseness in the officer, they become eager to do their duty, and in their confusion mistake the side to which they are to form : patience and a little good humored raillery, which will excite pride and not contempt, sooner correct these

errors than any other mode....striking a soldier on parade or any where else is execrable....a man who is an officer in his soul will never strike a man who he knows dare not return the blow but on pain of disgrace or death.

§ 4. After the facings are gone through, the habit of *marking time* must be presumed to be tolerably well acquired ; and the squad is prepared to commence the most important part of all the military exercise ; that is, marching.

The officer of the drill commences with the precaution :

Attention.

THE SQUAD WILL TAKE CARE TO MARCH IN SINGLE FILES
BY THE RIGHT.

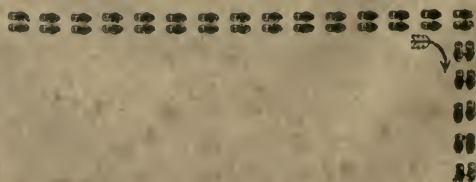
He will then explain to them the meaning of the word file ; that it means one man when there is only one rank ; when two ranks, the files are double ; and that a file consists in any number of men behind each other, so that if the ranks were eight deep, the number of files would be no more than the numbers of the front rank ; he will then make them acquainted with the length of the pace ; that every step taken must be exactly 24 inches, or two feet from heel to heel ; and that this must be the length of the step at all times, whether moving fast or slow ; every man must step two feet and no more. He will then give the word :

Right...face.

The whole will then be faced in single file to the right, as in the second position ; and having marched in that direction equal paces and in equal times, as far as is convenient, they receive the word :

Right...wheel.

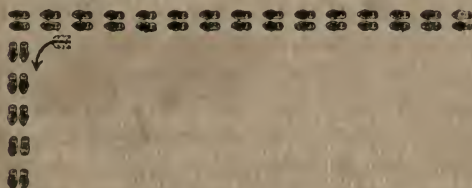
They then appear in the following position :



An important part of instruction commences with the wheeling to the right. The difference between *facing* and *wheeling* is to be explained; that *facing* always applies to each individual; *wheeling* always to more than a single individual; or that in facing every man turns on his own centre; in wheeling every man moves as if he composed a common mass with the rest of the rank; that several wheel, and several face, but one only never wheels alone, unless a rank is marching in single files, when it implies that every file which follows must wheel in the same direction: if the word of command be *right...face*, every man must face to the right, and it would then be a rank faced to the right; but in wheeling to the right, the direction that the leading file takes, the whole of the files take.

The squad is wheeled several times by the right, and at length into its first position and faced to the front; and then it is faced to the other flank and wheeled to the left in the following form:

Left...face.
Left...wheel.



The squad being marched and wheeled by the left, returns to its original position, and is faced to the front as before: the drill now requires to mix the movements, by facing and wheeling in different directions. The words are given with an interval....which produce the following disposition:

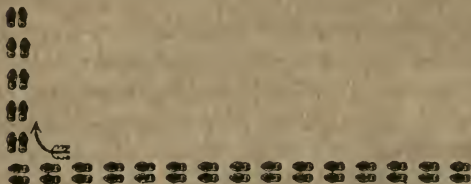
Right...face.
Left...wheel.



The squad having now been faced and wheeled in different directions ; the drill officer will caution the men to attend particularly to his word of command, that it is his intention to take them by surprise, and face them to the right or left when they may not expect it : and he uses his discretion in this, frequently facing them in different directions, and marching them into their first position in single rank.

He then changes his flank, and commences the opposite disposition, with

Left...face.
Right...wheel.



The company is now marched into the first position, and receive the words,

Halt....rest.

When they have been well exercised in these facings and wheelings, they will have learned to mark time with accuracy... the whole rank giving but one sound with their feet... they will have learned to face in three short curved steps, and to face to the *right about* in three long curved steps. They will have their ears habituated to wait for the word of execution : if they have not acquired these habits, the fault must be in the officer who teaches. It is impossible, if well taught, that these effects are not produced.

When the word *rest* is given, it always signifies that the men may stand without constraint, but on their ground, from which they must never move without permission. As a rule for *rest* in ranks, the left foot should retain its position where the rank halted ; and the right might be easily withdrawn and the knees easily bent, so as that the limbs may be at ease, and thereby refreshed by a relaxation from the disciplinary position.

CHAP. VII.

ELEMENTS OF EVOLUTION.

§ 1. **IT** now becomes time to divide the rank and to make preparation for a prompt execution by different parts of the same company or squad at one common command ; or, that the rank in two distinct divisions shall perform the similar operations at the same time, by one word.

The use of guides must be attended to in this stage of the exercises with great diligence and attention to exactness ; explanation must not be spared....non-commissioned officers, or other well disciplined men, must be directed to post themselves at the points of wheeling and formation of every section ; and to take their stations, so that each shall be in front of the section which is to dress by them, facing to the distant flank of the section ; and the flank man of the section forming, faced to the side of the guide.

The uses of the simple but invaluable contrivance of telling off, are further developed in this drill ; the men themselves must be accustomed to do, what by the old method was done by a non-commissioned officer. This will be found, in the progress of the drill and of the more enlarged movements of battalion, of the greatest importance, as it will at length become a habit in the minds of the men to know their number and place in the rank, and they will with ease be capable of executing formations on any front, without repeated telling off, or any other direction than the general word of command. The officer will give the word,

Attention.

And he will follow it by the precautionary information of such movements as are proposed to be executed.

THE COMPANY WILL TELL OFF ITS NUMBER OF FILES
FROM RIGHT TO LEFT.

Tell off.

twenty.
nineteen,
eighteen,
seventeen,
sixteen,
fifteen,
fourteen,
thirteen,
twelve,
eleven,
ten,
nine,
eight,
seven,
six,
five,
four,
three,
two,
one,

The officer then states, as precautionary :

There are twenty files, which form two sections.

No. 1 is the right, No. 10 left of the first section.

No. 11 is the right, No. 20 the left of the second section.

The two sections will now take care to execute the same movements by one word of command.

The whole....mark time.

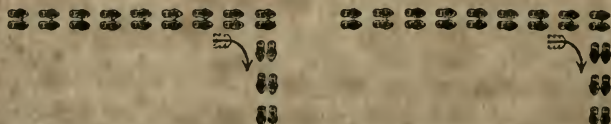
The whole raise the left foot gently about four inches from the ground together, strike it briskly to the ground together ; raising the right foot and striking it also, and so each foot alternately, which they must on all occasions continue to do until they receive the word *halt*. The officer will, to give them the time, tell constantly, until they are well drilled to time...*one, two,...one, two*. The officer will then give the precaution :

THE WHOLE WILL TAKE CARE TO FACE TO THE RIGHT
AND TO WHEEL TO THE RIGHT (or rear) BY HEADS
OF SECTIONS.

The whole....right face.

By heads of sections....right wheel.

This presents the first position, of single files, and the first movement in broken ranks.



The sections are now marched and wheeled to the right, and again brought to their first ground and fronted ; when they receive the precaution,

THE WHOLE WILL TAKE CARE TO FACE TO THE LEFT,
AND WHEEL TO THE LEFT.

The whole....left....face.

Heads of sections....left....wheel.



The whole being repeatedly wheeled by the left, and brought into their first position in single rank, will proceed to movements on the centre.

§ 2. The squad will now proceed to execute the facings inward from the flanks, and movements by the centre.

THE SECTIONS WILL TAKE CARE TO FACE INWARD (*or to the centre*) AND ADVANCE IN DOUBLE FILES TO THE FRONT.

This operation will be performed by the right section facing to the left, and the left facing to the right, and the left man of the right section, and the right man of the left section, facing to the front...

These two centre men form the pivots in this motion, and attending to precautionary words, advance in double files from the centre to the front; they should remain faced to the front, when the following command is given :

Sections....to the centre....inward....face.

From the centre....double files...,

To the front wheel....march.



The next command brings this column of double files faced to the right about, and then marches to the same ground they had left, on the following words of precaution and command :

The whole....right about....face.

Heads of sections....outward....wheel.



The whole will resume the first position on reaching the ground, on the word,

Mark time....front face....halt.

The teacher of the drill may require to be here again reminded, that though the course of movements, or the different

forms, are progressive, he must in his practice resort frequently to those movements already taught, so as indeed to keep the word of command and the manner of evolution constantly present to the memory, until they become a *habit*, until the language of the exercise and the mode of movement in exercise become predominant over every other mode of expression and habit.

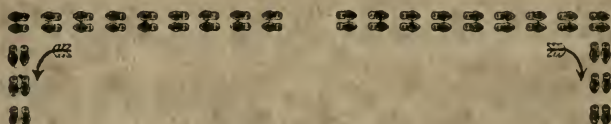
§ 3. The next movement will be from the outward flanks of the two sections by opposite motions to the rear, then moving in directions parallel to their original front; gaining their first ground by facing to the right about, and each resuming its former position by corresponding wheels.

The whole....mark time.

From the centre....right and left outward....face.

Heads of sections....to the rear....wheel.

The right section here faces and wheels to the right....the left, to the left.



By another word,

Inward....wheel.



They move towards each other, where they may be dressed and fronted, or made to execute any of the former movements at the discretion of the officer. When in order to be brought to their first position, they are faced from the *right about* and wheeled again into their first position.

Mark time....

The whole....right about....face.

Heads of sections....front wheel.



These movements should be followed by countermarching : which means only the act of the two extremes of the same rank changing places by military marching.

§ 4. The practice of countermarches in drill may be employed to the greatest advantage in fixing the exactness of *time*, and the length of the *pace* ; in habituating the men to wheeling without confusion in the midst of varied movements and ranks, each file always attending to its distance and the evolution in which each is particularly engaged, and not attending to the movement of others.

The rank is now supposed to be divided at the centre, and the object in view is so to march them that the files on the right shall be brought to the left ; and those on the left brought to the right. Being in one rank and faced outward, if they both wheel about on the same line, they must meet, and cannot pass each other without deviating from a direct line ; it must be so ordered that the sections move one by the front and the other by the rear ; this will be accomplished by the following precaution and commands :

Attention.

THE SECTIONS WILL TAKE CARE TO COUNTERMARCH
UPON THEIR PRESENT GROUND, AND FORM, FACED
TO THE REAR.

Sections....outward face.

Heads of sections....right about....wheel.

Countermarch....march.

They will then move in this form :



When they have so marched as that the rear of each section covers, in this form :



They receive the word of command :

Mark time.

Rear face....dress....halt.



The company is then brought by the *right about face*, to its former position, dressed and halted ; and is informed that it is intended to take a position to the rear of the present ground twenty paces, faced to the rear, and that this will be executed by countermarching.

Attention.

TAKE CARE TO TAKE POST IN THE REAR TWENTY PACES, BY A COUNTERMARCH FROM THE FLANKS.

Sections....outward face.

Rear wheel.

Inward....wheel.

Rear....face.

Mark time.

Right about....face....dress....halt.



The company is brought to the right about and halted. There will be only two more movements of countermarch here specified ; the officer of the drill, preserving the main principles of *cadence*, length of *pace*, wheeling upon *pivots*, cannot vary his exercises of countermarching too much ; he may form squares, orbs, and other figures, by wheeling round, any number of a section, and facing the whole to the right about,

unfold the figure, and display his rank ; it is a great object in discipline to render exercises amusing to the men ; exercise becomes then a recreation which never tires, and by which discipline is better established than by cruelty and abuse, or ungenerous treatment. Precautionary :

Attention.

TAKE CARE TO COUNTERMARCH FROM THE CENTRE BY THE FLANKS TO THE FRONT, AND ADVANCE TO THE FRONT BY DOUBLE FILES.

Mark time.

Sections...right and left outward...face.

Heads of sections....front....countermarch.

Double files....front wheel.



The next movement in countermarching is more complex, and is one of those which is well adapted to ensure exactness in wheeling movements. It is performed by the following precautions and words of command :

TAKE CARE TO COUNTERMARCH BY THE CENTRE TO THE REAR.

Sections....to the centre....face.

By double files....from the centre to the rear wheel.

March.

Outward wheel.

Outward wheel,



The double files from the centre having retired a few files, they are countermarched outward twice successively, which brings them to their first ground, upon which they receive the word,

Front....face....halt.

These drills will have prepared the men for the next stage of the drill, that of forming larger sections.

§ 5. The next progression of formation will be into files of three, or sections of three, or three in front....and here we find the use of having explained our terms in Chap. IV.

Those explanations will lead us up with more perspicuity to the method of formation of the order of three in depth, which will pursue the same principles, but apply them to accomplish other useful ends at the same time.

A single rank being formed as usual, it will be required to tell off by sections of three from right to left ; and the movements of the sections will now be so ordered, that by the advance of the first section of three from its ground, and an immediate wheel of the section upon its left, the successive sections will be taken up in their proper places, as the preceding sections proceeded along the front. By this means steadiness is obtained in the rank, distance is easier preserved, and when the whole have formed into the column of sections of three, wheelings in that order may be practised, and the accuracy of the pace tested by every wheel of section, and corrected with the most careful exactness. Attention to exactness at this period saves a great deal of trouble, and expedites discipline beyond belief.

PRECAUTIONS.

The company will proceed to move by sections of three; they will tell off by threes from right to left; the left hand man, or file who tells three, will be the pivot of each section of three, wheeling on the left; should the company wheel on the right in sections of three, the right hand man of each section will be the pivot.

Attention.

Sections of three....tell off.

The officer will see that no file misses nor repeats the number, and that it be *one, two, three*, from right to left....the right hand man saying one, &c.

3 2 1 3 2 1 3 2 1 3 2 1 3 2 1 3 2 1
 11 11 11 11 11 11 11 11 11 11 11 11 11 11 11 11 11 11

TAKE CARE TO ADVANCE FROM THE RIGHT BY SECTIONS OF THREE....WHEELING BY THE LEFT ON THE FRONT OF THE COMPANY.

Company....mark time.

By sections of three....from the right.

Forward....march.

Left....wheel.

At the word *march*, the first section steps out with the left foot, and continues to mark time in that direction, until the word *left* is given, at which word, the left hand man, who is the pivot of the section, faces to the left, and marks time, until the word *wheel* is given, when the other two men step off, and wheel upon their pivot....and the section steps *forward* at the word, and so each section of three in succession.

11 11 11 11 11 11 11 11 11 11 11 11 11 11 11 11 11 11
 3 2 1

The same course of movements is now to be pursued, as in the first drills of single files; and the wheelings are to be executed upon the same principles, from the left flank to the

front and rear. The first formation of the rank by reducing the column is made by left wheelings from the preceding position, as exemplified in the following figure; the company being wheeled to its first position, so that the left files shall stand on the ground from which they first moved. They receive the precaution,

TAKE CARE TO FORM FRONT, BY WHEELING ON THE LEFT
OF SECTIONS.

Mark time.

Sections....left....wheel.



Upon the word *left*, the left hand man or pivot of the section faces to the left, which is the original front....the rest wait for the word *wheel*, when they move into their positions, as before.

The rank may be brought into column of three in front, by the following command:

TAKE CARE TO FORM COLUMN OF SECTIONS OF THREE,
LEFT IN FRONT.

Sections of three....left....wheel.



The left half of this figure describes the position after the command is accomplished; the right half as at the word *left*.

They may now be marched left in front, faced to the right, and marched by heads of sections; faced again to the right, when the right will be in front; and wheeled into line and halted.

CHAP. VIII.

SECOND STAGE OF ELEMENTARY EVOLUTIONS.

§ 1. IN this place it may be proper to apprise officers who have not been well accustomed to the drill, or undertake the discipline of men, or who have never entered into an investigation of the use and importance of evolutions, nor of the great power which a body well disciplined will possess, in producing rapid manœuvres, in time and order; in this place it may be proper to apprise them, that as there is no possible mode in which men can form that the form of the ground and other circumstances may not require them to form in action, therefore they should be prepared for all that is possible, and although they may in the drill acquire a knowledge of movements which they may seldom have occasion to perform, still their knowledge of evolutions will never encumber them, and they will at least be accustomed to perform at command; nor will they be at a loss to comprehend the movements of others which they may see. At the same time, that as the habit of obeying, (and the perfection of discipline is in obeying promptly and correctly), is necessary; it becomes indispensable to understand what is ordered, in order to know how to perform it. A good discipline forms the habit to the requisite knowledge, both of the words and the manner of accomplishing what is ordered.

The drills are now to be continued by single rank, but with sections formed from the division of the rank.

The company being paraded as usual, ranked and sized, they will be told that the rank will now be divided into two parts, each of which will be called a division, or half platoon, in order to distinguish the half of the squad from lesser sections; the centre will be told off, and the whole will receive the word of precaution:

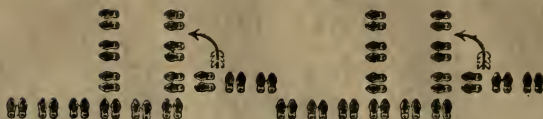
Attention.

THE COMPANY WILL MOVE BY SECTIONS OF THREE
FROM THE RIGHT OF PLATOONS.

By sections of three....from the right of platoons....

Forward....march.

Left....wheel



This movement, it will be perceived, differs from the movement from the right of the rank, only in the division of the rank into two parts, which, if the drill be full, may be called first and second platoon instead of divisions : or, right and left platoon ; if small, they may be called half platoons.

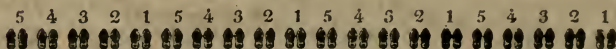
The exercises may be extended to sections of four, six, eight, from each platoon, according to the strength of the squad.

§ 2. From the sections of three, the progress may be augmented to sections of four or five, which will be executed in a single rank in the same manner, and all the corresponding evolutions will be practised as in the formations and movements in single file.

Attention.

THE COMPANY WILL TAKE CARE TO MOVE BY SECTIONS OF FIVE FROM THE RIGHT.

Tell off....sections of five.



The company is now wheeled upon its left, in front of the rank, into column of sections of five, marched and wheeled to the right, and to the left in column, and brought, as in § 3, chap. VII. to wheel into rank upon the left file.

It may be proper to remark here once more, that there is great utility in this method of wheeling into column from the right upon the front of the rank ; as it secures the dress of the rank, and determines the time of stepping off, for every succeeding section, in a manner much better adapted to assure correctness than any other method. The same may be done from the left of the rank, for the same purpose, as soon as the habit is a little formed to evolution.

§ 3. A new evolution may now be introduced, occasionally ; at once to familiarize the men to moving exact distances, as well as to give variety to the exercises. After being told off, the officer gives the word,

THE COMPANY WILL PREPARE TO EXECUTE WITH EX-
ACTNESS A NEW MOVEMENT...THE ECHELLON UPON
THE LEFT SECTION OF FIVE.

The left section will keep its ground.

The third section will advance a number of paces equal to its front.

The second section will advance a number of facts equal to double its front.

And the first section will advance a number of paces equal to trifle its front.

Mark time.

SECTIONS....UPON THE LEFT, TO THE FRONT FORM
ECHELLONS....

Forward...march.

They, thereupon, form the following disposition :

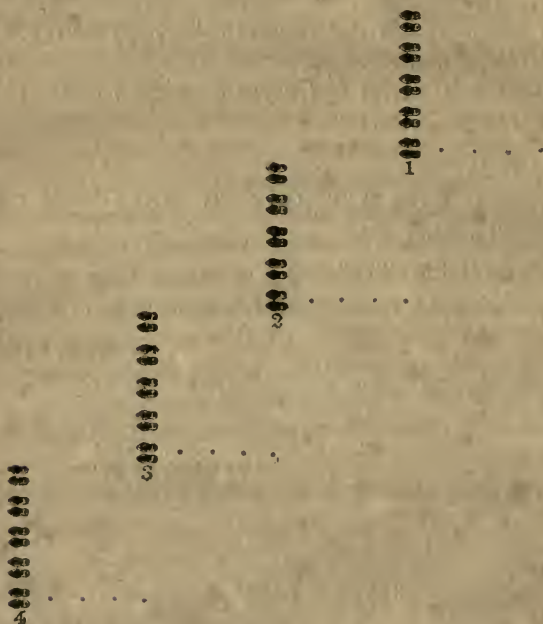


A useful and important instruction may be here communicated; as the sections are to advance perpendicularly to the front, a number of paces equal to the front of the sections from right to left; there being four sections; and one of them remaining on its position, the right section will have to move a number of paces equal to the front of three sections of five files, so that the right will have to advance fifteen paces, the second ten paces, and the third five paces; these principles should be inculcated at every opportunity; and the echelon disposition is particularly adapted to teach it accurately and test it by wheeling.

From this position the following may be formed :

Sections....upon your left....wheel.

They then present a front to their former left, and the left, which was before thrown back, now appears advanced, and the right appears thrown back in this form :



By the order being given :

Sections....right....wheel.

They are replaced in their former position. They may be then formed on any section in rank by naming and moving the section to the point desired, and the respective sections move up to that position, and dress by the section designated ; if in front they come to their right about, or, by file and wheeling, assume their position ; or, if exercised, as ought to be done at times, in rough or bushy ground, brought up by heads of sections.

The infinity of positions and movements to be produced from the simplest modifications of the echelon, of which these are only the first simple elements, the assiduous officer will soon perceive and appreciate

Every species of section, platoon, company and battalion is susceptible of disposition in this form, and during the war in Europe, lines of echelon have been formed, covering the whole front of several hundred miles, they affording in every direction points of contiguity and support, and comprehending in their scope of evolution, a square equal to the extent of a day's evolution on every side.

§ 4. The formation of any number of sections or any number of files in a section, is not usually taught by old teachers; for what reason is not easy to discover, since the skill or trouble in acquiring it for forming any number is not great, and the want of the practice of forming any number of files in evolution will be obvious upon considering that all movements in front must be governed by the extent of the ground to be passed over: so that it would be very absurd, if passing a defile, or a bridge, or a gate, though it would admit of 7, 9, or 11 files, and a regulation was established forbidding sections of any greater number than 5 or any less, the want of a flexible capacity in the evolutions of the battalions would retard the march.

The section should not be limited to any number of files in platoon, and it should be so disciplined as to form sections of any required front, either to augment or to reduce promptly at command. All formations in battalion, however, should be, as far as is practicable, composed of even numbers of files.

When this elementary discipline is taught to cavalry, they should be advised that mounted men, unless in passing the defile, never move or deploy in *odd numbers of files*; that their numbers must always be even; which is required, because the length of the horse does not admit of his wheeling on a square equal to his front.

We shall now proceed to augment the number of files in the section.

Attention.

TAKE CARE TO WHEEL INTO COLUMN BY SECTIONS OF SIX....THE RIGHT IN FRONT.

Tell off.

6 5 4 3 2 1 6 5 4 3 2 1 6 5 4 3 2 1
 11 11 11 11 11 11 11 11 11 11 11 11 11 11 11 11 11 11

The whole....Right face.

By heads of sections....Right wheel.

The following exhibits those sections in the state of wheeling by the right, or heads of sections :



The following is the state of open column after having wheeled to the rear and faced to the left, their distances being equal to their front....they receive the word,

Mark time.

Left face.



This column may be reduced to a single rank by a wheel on the left file, or by the *oblique order*, which is only mentioned here to have it understood, that it is first necessary to acquire the wheeling movements in the common mode ; and that in the practice of formations at a subsequent state, wheelings in rank will be superceded by the *quarter facing* or *oblique order* of movement, which is sometimes called the *loose order* of formation, the basis of which is the Line of Science ; which will be exemplified in a subsequent chapter ; and in plates V. VI. and VII. ; and in the same way the principle of quarter wheeling and half wheeling may be exemplified to form rank by sections of any given or required number, according to the front proposed to be assumed.

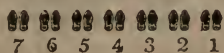
The principles of movement and evolution, exemplified in the preceding pages, apply equally to the movements of a squad of 20 or a battalion of 1000 men, and to any depth of line.

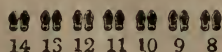
§ 5. An important principle remains to be exemplified, in the elementary part of formation, which is one of the most essential parts of improvement in modern discipline, and by which all movements in line and column are necessarily to be reduced to

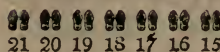
or augmented, as the nature of the ground shall require or admit of movements.

This principle consists in augmenting or diminishing front from the proper flank, and to the proper flank when moving in open column of manœuvre, or in close column of attack. The first movements are to be acquired always in open order, and they are to be first taught to a single rank, divided into a suitable number of sections.

The basis of this principle consists in this rule ; that the position of every file in the line shall maintain its correspondence through every evolution of the column. This may be understood, by counting the files, beginning on the right, and supposing the whole to be formed into sections of seven ; the sections being then wheeled upon their right into column of seven files in front ; the disposition shall be such as that, proceeding from right to left, the files shall be continuous as they first stood : the first file of the second section counting 8 and the last 14 ; the first file of the third section counting 15 and the last 21 ; the first file of the fourth section counting 22 and the last 28 ; and so on. Let it be supposed, that the column of seven files front is formed :


 1st section.
 7 6 5 4 3 2 1


 2d section.
 14 13 12 11 10 9 8


 3d section.
 21 20 19 18 17 16 15


 4th section.
 28 27 26 25 24 23 22

§ 6. It is required to augment the front from seven to nine files, so as to make a column of nine files in front.

The column being in motion, the word is given....

TAKE CARE TO AUGMENT COLUMN TO SECTIONS OF
NINE IN FRONT.

In order to render the first formations easy, and until the habit is formed to it, the column may be brought to retain its position in column at *marked time*, preserving open order until the augmentation of the front is completed, for which purpose, after the precaution is given, the word,

Mark time.

Form sections of nine....March.

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This view represents only the movements from the right, the movements from the left to occupy the spaces vacated on the right, are performed at the same time by a side step, by direct facing to the right, when on the ground, without advancing; or by a quarter facing and advancing on a diagonal line so as to cover the right hand file of the leading section, when in motion, which must be performed in every section from front to rear. The diagonal facings must be by every single man from his front to the direction in which he is to march and occupy, his

left shoulder in the rear of the man moving before him. So that the augmentations shall always come from the right of each successive section to the left of the section in its front.

The augmentation here presents an appearance, which, by anticipation, unfolds the nature of the *Line of Science* or diagonal movement; as the front section must be necessarily augmented by the files which would count next to it in the rank, the two right hand files of the second section, necessarily must march diagonally from the right of the second to the left of the first, so that No. 9 becomes the left file of the first section, on the left of the files No. 7 and 8; and No. 10 becomes the right of the second section; for which purpose, that file must move two paces to the right; this second section having been deprived of two men on the right, in order to possess the required number, No. 2 must obtain four men from the right of the third section, which four must move diagonally to the left of the second from the right of the third; and so the sections successively receive from the right of the sections in their rear, the numbers necessary to give them their required front. The augmentation being constantly made from the right of the next rear section to the left of the next front section.

Let it not be kept out of sight an instant, that all these changes are to be executed on the march at the quick time of a lively dance.

§ 7. These examples will afford the officer who has charge of the drill, opportunities to exercise his own taste, and form his habit to *command*....and prepare him for the execution of *manœuvres*; the men will find gratification in it themselves; a few wheelings into an oblique order will suffice to close the instructions for the drill with a rank of single files. The squad being formed and dressed, the officer will give the precautions:

Attention.

THE SQUAD WILL TAKE CARE TO TAKE GROUND TO THE
LEFT OF THE LEFT PLATOON BY AN OBLIQUE MOVE-
MENT IN SECTIONS OF FOUR.

Tell off....sections of four.

Mark time.

The sections will half wheel upon the left four paces....the right hand man will take care to step only four paces and dress.

Sections....upon your left....

Half wheel....march.



The sections are now marched to the required ground, and may be wheeled into column, by the words :

TAKE CARE TO FORM COLUMN BY HALF WHEELING ON THE LEFT OF SECTIONS....

Sections....upon your left....half wheel.

The sections may be next half wheeled upon their right into oblique order again ; and to give variety to their movements, they may receive the word....

Sections....

Upon your left half wheel....right....face.

They will then present this position :



They may be then faced and brought to the same position as if they had been half wheeled upon the right of a section :

Sections....right face.



They may be then wheeled upon their right into column, or upon their left into single rank, or from column wheeled into rank, which will place all the sections reversed, and the rank faced to the rear ; the original right sections being the left of the rank ; a useful evolution may be now executed, that is the *countermarch*, by which the sections may each move distinctly and

produce their original formation to the proper point. It may be executed by the following words....the rank being now formed faced to the rear :

TAKE CARE TO RESUME YOUR ORIGINAL DISPOSITION, BY
COUNTERMARCHING SECTIONS.

Sections....by your left....

Countermarch....march....front face.

They will then exhibit this position :



The following will shew the application of the echelon to the change of front, or the forming of a rank or line in a new direction ; the company is presumed to be already in rank, and wheeled upon its right into the position of the last figure of the preceding page, the following precaution is given :

THE COMPANY WILL FORM A NEW ALIGNMENT....FACED
TO THE RIGHT....AND FORM UPON THE THIRD SECTION.

Mark time.

Third section....right face.

Third section....upon your right file....form.

The right file or head of the section here keeps his place, but faces to the right ; the other files come up successively on his left and dress by the right.

The left sections will perform exactly the same motions, will face to the right, advancing their head file, till in line with the third section, and then dress by the third section ; the right sections will move till the head of each shall come into the line with the right of the third section, they will front and dress by that section at marked time, and continue till halted.



CHAP. IX.

EVOLUTIONS IN THE ORDER OF TWO DEEP.

§ 1. **T**HE formation of the order of two ranks, for evolution, may now commence.

The squad being drawn up in single rank, as usual, and the parade being dressed and steady, the whole ranked and sized, as in chap. V. receive the precaution :

Attention.

THE COMPANY WILL PREPARE TO EXERCISE IN DOUBLE FILES.

Tell off.

One, two...one, two...one, two...one, two.

The right hand man speaks out in a clear, quick voice, *one*, the second, *two*, the third, *one*, the fourth, *two*....and so on to the left.

The order of formation is that the tallest men shall be on the right and left of the rank, and that the men of the rear rank shall be successively taller than those of the same file in front ; this must be accomplished in a soldierly manner.

A moment's reflection will show that if the files be now formed out of the company, ranked and sized from the flanks to the centre, the common way, that the men of the front rank on the left half of the company, will be taller than the men in their rear, while the contrary will be the case on the right ; it will be necessary to obviate this by a more accurate method....The company being told off, the centre is found, and the following instructions and commands will be given :

The company will wheel into double files from the centre outward ; the odd files will in this movement be the pivots of the right half platoon, so that when the words....right and left, are given, the even files of the left half platoon face to the left, and the odd files of the right half platoon face to the right. They receive the precaution :

Attention.

TAKE CARE TO WHEEL INTO DOUBLE FILES FROM THE
CENTRE OUTWARD.

Mark time.

Sections...by double files.

Right and left...outward...wheel.

♠ ♠ ♠ ♠ ♠ ♠ ♠ ♠ ♠ ♠ ♠ ♠ ♠ ♠ ♠ ♠

This will be the disposition at the word *right and left* ; at the word *wheel*, they will move into this disposition.

♠ ♠ ♠ ♠ ♠ ♠ ♠ ♠
♠ ♠ ♠ ♠ ♠ ♠ ♠ ♠

Thereupon they will receive either the words,

Front face.

And they will present this disposition,

♠ ♠ ♠ ♠ ♠ ♠ ♠ ♠
♠ ♠ ♠ ♠ ♠ ♠ ♠ ♠

Or they will receive the word,

Left sections...right about...face.

Close order...form...halt.

They will now close up into the order of marching in double files, and will present the following disposition, which may be called a column of double files, or two ranks faced to the right.

♠ ♠ ♠ ♠ ♠ ♠ ♠ ♠
♠ ♠ ♠ ♠ ♠ ♠ ♠ ♠

§ 2. The next operation is to put the column in motion, which corresponds in general with the movements in single file ; the principal difference in modern discipline is, the care that is required in making all wheelings upon the principle of the *pivot*, by which is to be understood, that every man who is at the point upon which a wheel is made, is called the pivot ; and so must every man be, whatever be the number of men in the rank, section, or platoon, above one. This will be exemplified in the two views of a wheel to the right.

Attention.

THE COLUMN WILL TAKE CARE TO WHEEL TO THE RIGHT.

Mark time.

The right....

This word is to the single man on the head of the column, and on the right, the *word of execution* ; he must, as is represented, face to the right, while all the rest wait for the word

.....*Wheel.*



Upon this word, the man who has faced, steps out, and his left hand man wheels up on his left side ; and so every right hand man, on coming to the same ground on which the first man stood, faces briskly to the right, and marks time till his comrade on the left gains the same front by a wheel on his left ; they then dress and advance. The following figure exemplifies the operation of the wheel, conformably to this rule.

The officer will signify that all the movements now are to be made in two ranks or double files ; and that the intimation of *double files*, will now cease to be used.

Right wheel.

Forward....march.



The right hand man instantly faces to the right, on his gaining the rear of the advancing file ; the left hand man wheels round his left on as short a line as possible.

The following movements are simple wheelings of the same column to the right and to the left, upon the same principles, in single files, by the word,

Right wheel.



Left wheel.



§ 3. The progress of the drill next extends to sections in double ranks....they form in two ranks, and are divided into two sections ; they receive command as follows :

Attention.

Mark time.

The whole....right face.

By heads of sections....to the left....wheel.



The sections are, as in the drills of single ranks, after some marching, moved into their first position, and then follow movements to the rear : by the words of command which are now familiar.

TAKE CARE TO WHEEL TO THE REAR BY HEADS
SECTIONS.

The whole....right face.

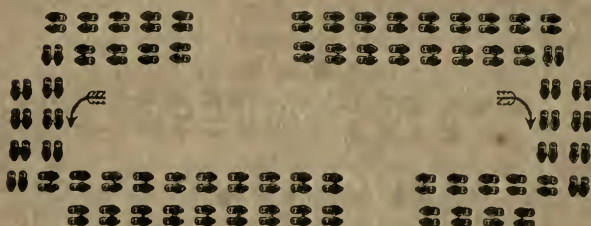
By heads of sections....right....wheel.



The numbers of files are augmented in the following figures, merely to display the movements more distinctly ; two bodies drilled by different officers, or when the drill is advanced, may be purposely brought into such relative positions, and be moved in a military manner, by such wheelings or counter-marchings, as shall be best adapted not to occupy the ground, or interrupt the evolutions of the other body.

These two bodies may be moved out of each other's way by one word of command .

Heads of sections....left wheel.



The two following counter dispositions, the left section facing to the left, and wheeling twice successively to the right ; and the right facing to the right and wheeling twice successively to the right ; exhibit a countermarch....

Heads of sections....

Right wheel....right wheel.



§ 4. Wheeling inward in double files, and to the rear in column of sections of four....and outward in double files from the centre.

TAKE CARE TO FORM COLUMN UPON THE CENTRE....
FOUR IN FRONT...WHEELED TO THE REAR.

Mark time.

Sections....inward....face....dress.

*From the centre....heads of sections....outward wheel
....march.*



Facing inward....and wheeling to the front from the centre by sections of four, exhibits another method of forming column on the centre.

Sections....inward face.

From the centre....heads of sections....front wheel.



These evolutions, which may be varied to advantage, will suffice for the first movements in double files, or two ranks; as we approach a larger section the subject becomes more familiar in practice, and more interesting, as it yields an inexhaustible variety; although it must be now clearly perceived that it consists in the application of only the *three* primitive principles of *marching* exactly, *facing* and *wheeling* correctly.

The formation of column upon the centre is further illustrated in chapter XI. § 5 and 6. The words of command will by this time be sufficiently understood.

TAKE CARE TO FORM COLUMN IN THE REAR OF THE
CENTRE SECTIONS.

Mark time.

The two centre sections will keep their position.

The sections right of the centre will face to the left, the left sections will face to the right.

Inward face.

To the rear....quarter face....march.

Mark time....front form....dress....halt.

These movements are also illustrated in the plates III. and IV. and explained in the following chapters.

The formation of two ranks, by wheeling into double files and facing to the front, is not the usual mode in any system hitherto practised ; various contrivances have been made, ingenious as matters of mere parade and agility ; and some of them applicable to particular descriptions of troops ; such as by telling off from right to left in terms by the men, the first beginning with *right*, the second with *left*, and so on from right to left ; and by the word of command, *left files....to the rear double*, which brings the left files in the rear of the right hand files. This method is well enough adapted to mere parade, and it may serve for the parade of guards, and even for the drill of rifle corps where the advancing and retiring by files is part of their discipline. But as it is expressly required, that no movement or evolution be admitted, but such as is conformable to the mode of movement for action, it is thought fit to repeat it here, because having formed double ranks by movements in cadence, with which the common modes of movement do not accord, so throughout each progressive variation of evolution is to be conducted upon the same principles ; the method of action is the base of all military instruction ; if other modes are admitted on parade, or for the amusement of officers, let them arise as incidents, or matters by which the officer can shew the diversity of his skill in imitating all kinds of discipline ; let the system for actual discipline and movement, be founded on simple, intelligible, uniform, and scientific principles.

CHAP. X.

DIAGONAL MOVEMENTS.

§ 1. **DIAGONAL** movements have been always in use, employed as an incident arising out of necessity, without any rule or regulation : instead of following nature, disciplinarians have opposed it ; and they have been sought to be overcome instead of being explained. The passion of military writers and parade officers has been to please the eye and accomplish movements without knowing why or wherefore, and by means adopted without investigation ; instead of drawing a rule from natural data, they assumed as a fact, that all military movements were to be regulated by circles, or parallel lines....and held every deviation from these to be a violation from military principles. Even the Greek and Roman examples were thrown away. It came, however, to be discovered, when officers learned to reason, and men who were fit to command had the regulation and equipment of armies, that the faculties and capacities of men were the first consideration... that their faculties of mind and spirit were limited only by disease or physical impossibility ; but that certain operations of war depended upon celerity, precision, and the preservation of the muscular power of the men. To diminish the quantity of fatigue, was to preserve the unwasted portion of human power for service. To shorten the space of military motion, was by the same means to save *labor* and *time*.

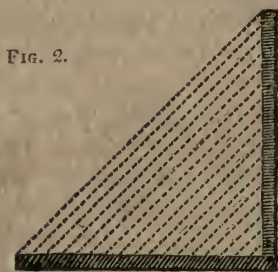
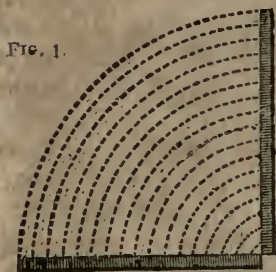
When it is considered that during the long war of Louis XIV. of France, eight of those who had risen to the rank of marshals of France, were so very incompetent as to have brought France to the verge of ruin ; and that not more than three really merited the name of generals ; that England, so renowned for admirals, has not produced an equal number of general officers in three centuries ; and that Marlborough alone stands upon the

same elevated ground with Turenne, Conde, and Luxembourg ; we shall not be surprised that military principles, like truths of every kind, have had to fight their way through the thickest disorder of ignorance, and the quackery of men appointed to stations for which God had denied them the smallest qualification. The devotion to old forms is generally the effect of a total ignorance of what is good or right in any form. Folard, whose columns are now universally adopted, was persecuted to death by those who hated him for the innovation ; Guibert, though not quite so unfortunate, improved military science so much as to be hated ; the improvements in light artillery which have produced such wondrous effects, forced the inventor out of France into a foreign service, from which his improvements at last forced France to recal him ; and Grimoard, who lives at this day, was a persecuted man, because he sought to promote improvements in science, at the head of which were at that time placed the greatest blockheads, and particularly in the military art.

Saxe and the Prussian Frederick had employed the great principles of the oblique movements ; but it was left for the French revolution to reduce them to the utmost simplicity.

The principle consists in avoiding, wherever practicable, movements upon the periphery of a circle, of which the centre is the pivot of a rank : in the ordinary way, if a platoon of 25 men are ordered to wheel upon their right, the line upon which they stand would form one side of a rectangle, and the line to which they have to move would form the other side ; each man excepting the pivot man, would have to move the fourth part of a circle, and there would be several circles successively larger in proportion as the rank extended from the pivot to the left ; and as the distance moved upon the whole of a circle is to the diameter as about 3 to 1, so the movement upon the fourth of the circle must be in the like proportion. The rank being 25 men, gives 75 feet for the front of the rank, and that must necessarily be the length of a semi-diameter....the order being given to wheel upon the right, the soldier on the outward or left flank will have to perform his march in the wheeling on the exterior or periphery of the circle : and this will be in length more than a right line drawn from the centre, as one half of the circle is to one fourth of the periphery, or as

50 to 75, he will have to march 75 feet, or 900 inches ; instead of 50 feet or 600 inches ; but as he must reach that point, it is necessary he should do so ; the new principles determine that it must be done in the shortest time, with the least labor, and therefore by the most direct line ; and so of every man, each is required to go direct to the position in which he is to form ; and the shortest line is that which is called the hypotenuse of a rectangled triangle ; thus every man moves upon a direct line drawn from the point upon which he stands, to that which he is to occupy. The operation of the circular wheel is shewn in fig. 1. and the oblique in fig. 2.



To carry this principle into immediate operation, the first drills of the augmentation of front have afforded occasion to commence it, and it remains to give a variety to the exercises.

It must be begun with a single rank, who must be exercised for a short time in facing to the right and left, at marked time ; after which the officer must inform them of a method devised to shorten evolutions ; and that it consists of facing not quite as far round as in facing to the right or left, but about half that space, whence it will be called *half facing* ; that the purpose of it is to place every man in that position, that by pursuing a straight line from the point on which he stands to that into which he is to be formed, he may execute the movement more *exactly, directly*, and in less time. He gives the word of precaution, and follows it by the movements.

Attention.

Mark time.

Right face.

Front face.

Right....half face.

Front face.

Left face.

Front face.

Left....half face.

Front.

§ 2. As soon as this is tolerably well understood and practised, and that in half facing to the left, the left shoulder of the second man is in the rear of the right of the first, and they all dress well half faced....the rank, formed and half faced to the left, will present this appearance.



They are then fronted and dressed in rank as usual.

To give them a gradual acquaintance with the mode of movement....they must be directed to tell off by sections of three, and receive the words in the following order:

Attention.

TAKE CARE TO TELL OFF BY SECTIONS OF THREE.

Tell off.

One, two, three....one, two, three....

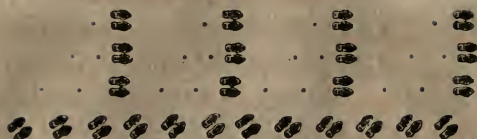
Precaution....

THE COMPANY WILL NOW FORM COLUMN, THREE IN FRONT, FACED TO THE RIGHT (OR ON OBLIQUE LINES.)

THE SECTIONS WILL MOVE FROM RANK INTO COLUMN BY THE LINE OF SCIENCE.

Mark time.

Right....half face.



They should now be formed into rank by quarter facing to the left....the left hand man of each section as usual facing at the word *left*, and moving into rank at the word...*front form* ; the men forming the pivots face to the front, the other two files left waiting for the word *half face*.

TAKE CARE TO FORM FRONT UPON THE LEFT OF SECTIONS.

Left....half face.

Front....form....march.

§ 3. The same method may be now pursued with sections of 4, and 6, 8, 12, or 20....and at length the whole parade may be made to move up by the line of science; guides of evolution must be employed in these exercises.

Plate I. represents a company in three positions, with officers posted; the two first conform to the old mode, which is still retained and used when necessary; the third describes the new oblique order, or *line of science*. This plate and plates 2, 3, 4, 6 and 7, will serve to illustrate the new method of movement.

Fig. 1, plate I. represents the company after having been told off by the voice, into twenty double files with the officers posted, the captain on the right, the first lieutenant on the left, and the second lieutenant and ensign forming the supernumerary rank in the rear; the officer of the parade intimates as in § 1, 2, chap. VII. that the company is to form two sections or half platoons, of which 1 is the right and 10 the left of the first half platoon; 11 is the right and 20 the left of the second half platoon; that the company is to advance by half platoons from the outward flanks to the front; and the whole being dressed receive the following words, which all lead from the first to the second position:

Attention the whole.

THE COMPANY WILL TAKE CARE TO ADVANCE BY HALF
PLATOONS FROM THE FLANKS TO THE FRONT.

Half platoons....outward face.

To the front wheel....forward....march.

Mark time.

The front rank man on each flank of the rank are the pivots and do not move on the word *outward face*, the precautionary word having taught them that as they are to wheel upon the flanks, they act as pivots.

Fig. 2. plate I. shows the company advanced in columns of double files in half platoons, and the officers posted on the inner flanks.

Fig. 3. plate I. represents very distinctly the new method of formation, by the line of science. To comprehend the intention of the plate, it must be understood that the men in column described in outline only, in fig. 3. represent the same men as those formed in column in fig. 2. and that they are here shown in the two dispositions the better to exhibit the method of movement from the columns by the oblique line, into the platoon of double files ; so that the *outer ranks* on both ends of the figures 2 and 3, constitute the rear rank when in order of platoon.

The old method of wheeling would face the two half platoons inward : but the new method only quarter faces them, and moves them by the following words ; which immediately succeed *mark time*.

THE COMPANY WILL TAKE CARE TO HALF FACE INWARD,
AND FORM FRONT BY THE OBLIQUE MOVEMENT...

Half platoons....inward....half face.

To the front form....march.

Mark time....dress....halt.

§ 4. The plate annexed, No. II. presents the movements of the company in sections of five, in three dispositions, the two first corresponding with the principles laid down in chap. VIII. and the evolutions by sections wheeling to the right by heads of sections.

The company in fig. 1. is represented in two ranks, as having received the following words of command and completed them:

COMPANY, TAKE CARE TO ADVANCE TO THE FRONT BY
THE RIGHT OF SECTIONS.

The whole....mark time.

Right face.

The captain is posted on the right, the first lieutenant on the left, the second lieutenant and ensign in the rear or left when faced; the right hand man of each section on hearing in the precaution that the sections are to advance by the right of sections, will hold themselves as *pivots*, and will not face to the right, so that as presented in the plate it will be perceived these pivots keep their position, but they must mark time with all the rest; and the captain also retains his front to command and lead.

Fig. 2. plate II. represents the company in the position it has taken, upon the execution of the following words immediately after the preceding.

Heads of sections....left....wheel....march....halt.

Here sections are formed and an officer posted on the left of the leading files of each section, according to the old method; but the new method requires the leaders of sections to be on the right.

Fig. 3. plate II. presents the method of formation by the improved oblique movement, or line of science. Particular attention paid to this mode of formation, in one instance, will render every similar movement easy and familiar; there is no difficulty in it other than as it differs in form from the operation of wheeling, but it affects only one file; thus, as the left hand man of each file when the company is wheeled into sections upon their right, belongs to the rear rank when formed in ranks entire, when the *quarter facing*, for the oblique movement takes place, these files which belong to the rear rank, must so govern their facing as to fall into the rear of the man who forms their right in sections and their front in rank.

The company being formed in sections as in the unshaded lines, fig. 3. is required to form to the front by moving in the new oblique order, by the following words of command; the *pivot men*, or those on the right of each section who belonged to the front rank, retain their position to the front.

Attention.

TAKE CARE TO FORM FRONT BY THE OBLIQUE MOVEMENT.

Left....quarter face.

March....mark time....dress....halt.

§ 5. Plate III. represents the formation of column upon the centre of platoons. This method is now adopted in the French system for the movement of lines in advance or retreat, in preference to that in the regulation of 1791, without however excluding the latter, whenever a flank formation may be preferred.

The military movements are the same as in the preceding, the company forms two half platoons by numbers told; and instead of being wheeled on the outward flanks, they are now wheeled upon the inner flank of half platoons, as in § 4, Chap. IX.

Attention.

THE COMPANY WILL TAKE CARE TO FORM COLUMN UPON THE CENTRE, BY WHEELING UPON THE CENTRE TO THE FRONT.

Mark time.

Half platoons....inward....face.

Front wheel.

Mark time.

Fig. 1. represents the company faced inward, all but the central or leading section of the column.

Fig. 2. represents the company advanced in column four in front.

Fig. 3. represents the formation to the front, by the display of the column according to the new oblique mode of movement, which is executed by the following words of command:

Half platoons....outward....quarter face.

Upon the centre....front form....march.

Mark time....dress....halt.

§ 6. Plate IV. represents the company advancing from the centre of half platoons. This method of movement is very important; it has been adopted in the French system, in preference to the movements from the flanks, in the formation of columns of attack, upon the recommendation of general Meu-

nier, and was practised at Rhamanie, in Egypt, by columns of very large depth and front, who were separated from front to rear, and made to form distinct columns upon some occasions. The company is as usual told by the voice and in numbers, and the whole company now forms two half platoons, and four quarter platoons or sections, as the 1, 2, 3, 4, 5, form the first section; 6, 7, 8, 9, 10, the second section; 11, 12, 13, 14, 15, the third section; 16, 17, 18, 19, 20, the fourth section.

It being intended that they should move to the front from the centre of half platoons, the necessary precaution is given....and the words in the following manner :

Attention.

THE COMPANY IS TO ADVANCE BY SECTIONS FROM
THE CENTRE OF HALF PLATOONS.

The files 5 and 6, 15 and 16, will necessarily be the pivots, and the whole will be faced so that the left sections of each platoon shall be faced to the right, excepting only the pivot men, and the right sections face to the left, except the pivot men.... they then receive the words as follows, and execute them :

Mark time.

Sections....to the centre of half platoons....inward face.

To the front....in column....march.

Mark time.

Fig. 1. plate IV. represents the sections faced to the centre of half platoons.

Fig. 2. plate IV. represents the half platoons advancing in two columns of four in front, in which position they are brought to mark time.

Fig. 3. plate IV. represents the sections as about to form front by the new method, that is by quarter facing *outward*, all but the pivot man of the front rank of each section. It will be perceived that the rear rank men of the company form now the two interior ranks in file, and the front rank men form the two exterior ranks, so that the two men who form the actual centre of each front rank in column, belong to the rear rank in line; and they must move accordingly when the rest move obliquely

into their positions ; this being an outward instead of an inward diagonal movement ; the following are the words of command :

TAKE CARE TO FORM FRONT BY AN OBLIQUE MOVEMENT.

Upon the centre of half platoons....front form.

Outward....half face.

March....dress....halt.

As soon as the drill of double ranks shall have been gone through, and these diagonal movements are well practised, leading by the oblique movement into every evolution, with the principles of pivots and guides ; the men being able to execute these, are competent to enter into the battalion, and partake in the enlarged application of these principles ; which may be done when the battalion is manœuvred without arms.

The morning drills of those now exercised should be the manual exercise ; to begin with the firing motions, with a wooden stopper for a flint. The first and last motions should be those of firing.

Firing and taking aim must be a particular exercise....and must be taught with ball and by shooting at a target, at given distances, so as to find the range of the shot and the level.

The principles laid down being completely executed in successive drills, must now be varied every day, never commencing with the same exercise ; after *marking time, facing, wheeling,* and *stepping out the proper length of two feet,* have become a habit uniform and correct, and the company capable of performing them in double ranks.

The exercises may be varied so as to admit of an infinite diversity of changes of front, flank, formations of sections, moving in different dispositions at the same time ; every thing done by such movements now properly assumes the name of evolution.

It must be observed with regard to the positions of officers in *platoon, half platoon, or section,* whenever an officer leads either, that, contrary to the old method, the place of him who commands any of these component parts of battalion, is on the right and front of his command. Supernumerary subalterns, either take post on the left or rear.

CHAP. XI.

EVOLUTIONS.

1. **EVOLUTIONS** are the movements of a single corps either for the purpose of taking a new position in order of battle, or a new order of depth or formation, in the line or on a march. The purpose of discipline is to teach the method of executing evolutions in a proper manner; and it is essential to every evolution, that it shall be executed upon the best received principles, and these are best which effect good order, directness, precision; which cover the least space, and occupy the least time in the operation, without creating any unnecessary fatigue. All evolutions, though executed by a single corps upon principles which are confined to itself, must in their design and purpose as well as in their execution, have reference to their connexion and dependence on other corps. Thus one battalion may form a column in the order of attack, that is an evolution to form column; another battalion may at the same instant throw back a wing or half wing upon a menaced flank, this may be executed by the evolution of the echelon; these two evolutions make but one manœuvre; and whatever may be the number of corps which move at the same moment under a given order, each distinct corps will perform an evolution, while the whole execute a manœuvre. But the wings of the same army may perform different manœuvres, and in such cases it has been usual to give to such movements the title of the *grand manœuvre*. These explanations of the terms will enable us to proceed with more confidence in the knowlege of what we are about.

The drills through which we have passed are to be considered only as the means to acquire a due knowlege of the mechanical practice of military movements....the habit of executing them by any number of men in the same time and in a proper manner ...and a thorough knowlege of the language used in military

exercises. The instructor who fails to teach the meaning of the words as well as to put the men in motion, leaves the principal part of his duty undone. Every soldier should know the meaning and use of every step he takes, as well as the sailor should know the name and use of every rope in a ship.

Evolutions are simple and compound, and in this respect are often confounded with manœuvres. A simple evolution is when a whole corps moves in one manner in a direction ordered ; a compound evolution is when a corps moves to one point by two different forms of evolution.

All evolutions are to be performed by at least two ranks, or files two deep ; and they should be practised in three and four deep. The principles being the same, the only difference consists in the manner of forming the ranks of more than two deep ; which cannot be difficult when the principles in this work are well understood.

The simplest evolutions, and those of the greatest use and variety, and which afford the greatest facilities for manœuvre and change of front, flank, or position, are the echellons. By these columns are formed or reduced, wings are advanced or thrown back, new alignments taken up, countermarches executed, and an enemy deceived both as to the number of the force, and the purposes proposed by particular movements, as they afford the facilities of support without disorder, at any required point.

Next to the echellon, the column, which affords a like variety to the formation and reduction, or the display of which the principle of the echellon is an excellent auxiliary and introduction.

To accustom men to move in every required manner, (and there is no possible manner in which it may not be required to move,) the movements in echellons should assume every possible variety....they should commence with the direct or perpendicular echellons ; and the echellons formed, should be marched, faced to the left, so that the left of platoons should be the front, faced to the right about, so as to give the opposite direction.... wheeled upon the right and left so as to present different frontsthe wing that was thrown back advanced....and both wings advanced, the centre thrown back....and the contrary....wedges

and sheers of the ancients are thus formed....crosses, squares, of the modern form....and the practice should go to teach platoons to take different directions, and while retaining each platoon complete, the order of the whole should be restored, by a general command to form line, column or echelon, on a given platoon....so that each officer with a platoon should then take the command, and march it to his position in the most direct and best military manner.

Another exercise of the evolution drill should be to teach the platoons to disperse as if thrown into disorder, and to rally at a signal....a course of exercise of the greatest importance, but which no system has touched upon as elementary.

The elementary discipline being confined to the acquisition of those principles which go into the movements of the battalion, should be the same throughout the largest armies; a perfect method of unfolding and countermarching corps, the flexibility of evolution, the adoption at every instant of that evolution which is best adapted to the ground upon which the operations are made; ease and celerity in passing the obstacles with which the ground may be incumbered, or the attack to be made or resisted....are the objects to be familiarly attained. If an officer feels a want of a due knowledge of these principles, and every one who has not had experience must, the necessity of beginning well and going through with the elementary principles, and acquiring them with earnest assiduity, will be obvious.

To discriminate between the two classes of commands, those in battalion given by the superior officer are expressed by SMALL CAPITALS....these words must be understood as repeated by each company officer, and followed by those commands which are necessary to their execution by each company, and are expressed in *Italic letters*.

It now remains to render familiar the different modes of changing front; the use of guides of evolution, in determining with accuracy the new line of formation by echelon....the formation and display of the column....and the most improved methods of forming and reducing columns of attack, with one or more lines, and the method of retreat in order of battle.

§ 2. ECHELLONS.

The perpendicular or direct echelon, is described in Chap. VIII. § 3; and the half wheels in Chap. VIII. § 7, describe the echellons of the oblique order.

The following is an example of the perpendicular echelon with the centre platoon advanced, and the wings thrown back; this may be accomplished, by either of the following words of command, supposing the battalion to be paraded.

THE BATTALION WILL FORM ECHELLONS OF PLATOONS,
THE CENTRE ADVANCED.

MARCH.

Centre platoon—forward march.

[Each platoon advances a number of paces equal to the front of all the platoons on its flanks.]



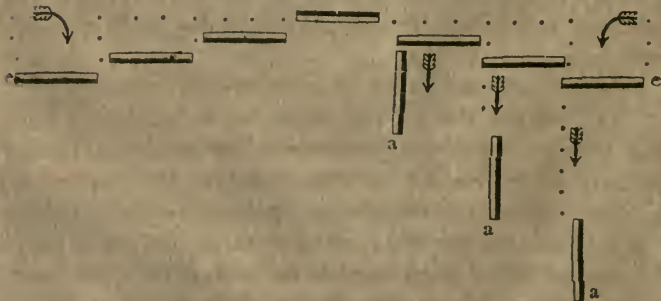
Or a line being formed, it is required that they assume the disposition without moving the centre platoon.

THE BATTALION WILL FORM ECHELLONS ON THE CENTRE
PLATOON...WINGS THROWN BACK.

Centre platoon—stand fast.

Flank platoons—right about face—march.

[All the platoons will throw their guides to the points which they are to occupy and move to them at marked time.]



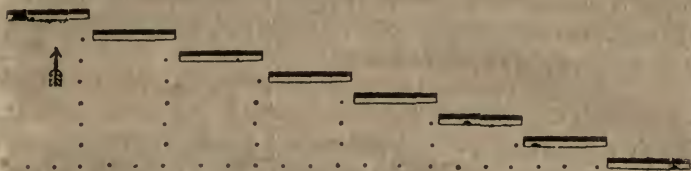
The echellons at c, c, shew the movement ordered; the platoons a, a, a, shew the right wing as wheeled or marched: heads of platoons and faced in echellons to the right.

The first of these dispositions enables the officer to advance or hold back either wing....thus, if he chooses to advance the left wing, he will execute it by these words....and it will display the following position.

TAKE CARE TO ADVANCE THE LEFT WING IN ECHELLONS
UPON THE CENTRE.

March.

Left platoon....forward.



The principle of the echelon may be applied, as well to throw back a wing, as to form upon any given platoon. The application of the principle is all that is required in an elementary work.

As soon as an order is given for a formation out of the line then occupied, the business of the guides is to take their positions on the points upon which each platoon must rest in the line moved upon, and facing in the direction to which the new front is to be made, remain there until the sections or platoons are about to occupy their ground, when the guides should face to the pivot flank, and each platoon should dress by the shoulder of the guide or pivot on its right.

This principle may be gradually extended to larger sections but not until the manœuvres begin to be formed in double ranks; because then the guide taken from the front rank does not leave any interval, as the rear rank man always steps into his place, and falls into his own when the guide resumes it.

A battalion drawn up in close order is required to take a new alignment, by advancing the right wing sixty paces on a platoon named. ..the officers are all at their stations; the serjeants on the right and left of each company; the serjeant on the right of the rear rank is the covering serjeant of the platoon

officer of each flank, and performs the function of *guide* or *pivot*, according as the right or left advances ; in the present movement the serjeant on the right is the guide of the right, the serjeant on the left is the pivot.

As soon as the battalion is formed, the word *mark time* ceases as a general word of command, but the action of marking time commences with the first word of command for movement, and must continue until the word *halt* is given ; the captains will see that it be strictly performed.

The order of command corresponding with *attention* in the drill, is usually a *ruffle of the drum*, by an orderly drummer who attends the commanding officer....these and similar directions will be given in a smaller letter.

Ruffle....(for attention.)

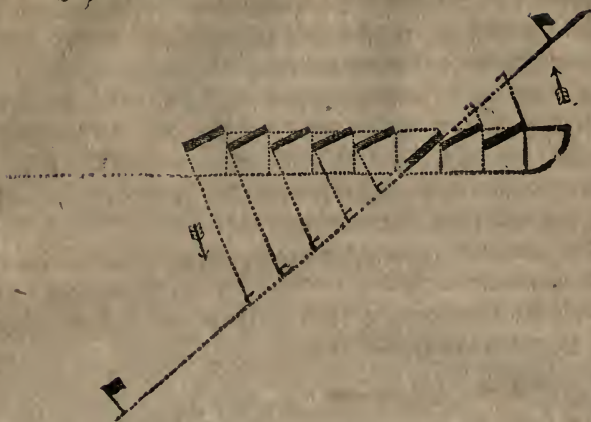
BATTALION TAKE CARE TO FORM A NEW ALIGNMENT, BY
ADVANCING THE RIGHT FLANK SIXTY PACES IN FRONT
....MOVEMENT BY ECHELLONS OF PLATOONS ON THE
THIRD PLATOON FROM THE LEFT.

Guides to your posts.

Mark time.

The major or adjutant on the right moves to the 60th pace and faces to the left : the adjutant or serjeant major, on the left, proceeds to the forming point of the battalion, and faces to the right : and the serjeants from each company step out briskly and dress in a line with the major and adjutant, and then all facing to the third platoon from the left, which is now the wheeling or forming point ; in the following diagram, the original line is marked by a horizontal line of points ; the platoons are wheeled from the line upon their left into echelon ; the two platoons on the left, upon the word march, come to the right about, and move to the new alignment which is thrown back from their first line ; the platoons on the right at the same time move to the front, where their guides are posted on the new line, which is described by flags on its extremes ; they remain in this position so that each company shall move up to its own guide : but the companies continue to mark time from the moment the guides step out, and they wait for the word of execution....which will be either FORWARD, or MARCH.

Left quarter wheel.



The annexed plate V. is from the French system, plate XX. and represents two operations in which accuracy of formation is assured by guides. Fig. 1. in the upper division, represents a battalion about to advance a required distance *in line*, direct ; to preserve its parallelism, three guides are thrown into the rear of the centre, perpendicular to the line of the battalion, who dress by the colors, and by a tree which is in front of the line *y*. The three guides, *i*, *a*, *b*, in the rear, are to preserve the perpendicular movement of the centre, and two on the flanks dress by the centre, where the colors are ; the major, adjutant, and serjeant-major, aid in correcting the movements of the guides ; the major places himself at *k*, and a guide takes a position in front of the colors, and facing round to the battalion marks the direction with the colors and the three dressed guides in the rear ; as the battalion advances, two or three guides in front advance successively, and facing to the battalion, dress, so that as the rank approaches a guide, that guide hastens to the front, and takes a position twenty, forty, or fifty paces beyond that which is farthest ; *e* represents the serjeant-major attending to the dressing of the line ; *i* the adjutant on horseback ; *ff* are the guides which dress with the colors.

Fig. 2. the advance of the same battalion presents it as about to advance the left wing ; *f* and *g* represent where are posted the major and adjutant as the flank guides, dressed with the

colors, the moving guides having resumed their posts on the flanks of the battalion....the movement now required is to advance the *left* wing upon a new alignment. The right therefore is now the *pivot* flank, and the guides of platoon are thrown forward from the left of platoons : as soon as the word is given, to advance the left in line, the adjutant gallops to the point that advances, and faces towards the right, the major on the right faces towards the adjutant on the left, the guides of platoons move out and dress by the major and adjutant, facing to the pivot flank which is now the right, and the whole move into line as before.

In the lower division of this plate is Fig. 3. which is from plate XXII. of the French system. The principle of the movement by the guides is here the same. Fig. 1, *d* is the first position. Fig. 2, shews an advance of the left wing, as in the preceding figures, *c* and *g* shew the guides, and *i* and *g* the guides in the *oblique* alignment, *f* the position of the major....*b* shews the serjeant-major dressing the line....*l* the adjutant directing the movement in front into the new alignment....*c* is a line parallel to the second movement or oblique line.

§ 3. The plate No. VI. exhibits the application of the line of science to several useful purposes, that is what is denominated the *loose order* of movement ; which instead of wheeling ranks, *quarter faces* the files, moving either in *file* or *line* or *column*. Fig. 1, Plate VI. represents a company in the order of three deep faced to the right and wheeling by the head of the platoon to the left. The guide leads at *a*, the captain on the wheeling side at *b*, an officer at *c* directs the perpendicular line of the right. The officers and sub-officers are at their stations on the right of the column, the captain occasionally at their head.

Having reached a point at which they must wheel to the left, they receive the command, and the officer at *c* directs the wheeling. Having half wheeled to the left, and reached a further point, they are wheeled into platoon in the loose order instead of ranks of files at fig. 2.

Fig. 3, Plate VI. represents the platoon moving from *a* to *a*, in column or head of platoon in front ; the dotted lines on the rear shew the original position of the column ; the darkened figures, the men formed by a half face to the left....the guide at the head

of the column pursues the line marked for him ; the new line perpendicular to the left of the old, is formed by the movements of the single files, not directly after the guide but on oblique lines to the left. The officers and covering rank are on the right of the movement, as that side is the rear ; they are seen in the rear of the new line.

The arrow in the plate is reversed, but it may serve to shew that the movement may be made in that direction also.

§ 4. THE COLUMN OF ATTACK.

The column contains *the great secret of modern tactics*, it is the most certain lever in the hands of a skilful officer....its advantages are found in its comprehending a large number in a small compass, for various ends ; first, in order to be displayed upon any required point at the moment that it may be most effective. Second, that it deceives an enemy as to your force and intention, an example of which was seen in the battle of Jena. Third, that the evolutions of a close column executed upon ground of small extent, are less liable to error and better adapted to correct faults, than any other disposition. Fourth, they render the movements of an army simple and easy. Fifth, *that there be an equal column in reserve, at sustaining distance.*

Columns of attack with the bayonet may be composed of battalions of 500, 800, or 1000 men ; and two or more of these columns may form a common front in column, or they may be displayed into several columns in echelon to a centre column advanced or to a flank column ; or so disposed that two flank columns sustaining one, may advance upon the charge of the advanced column and display upon the flank of an enemy.

It is to be understood that the use of the column for action, is now preferred by a formation on the centre ; although forming the column upon a flank platoon or battalion, is not laid aside, because the position of the enemy may render a flank the most proper ; but as a general rule, wherever there is a choice to be made, the column should always be formed on the centre, and reduced by the flanks.

The dispositions of the column, as laid down in Steuben's tract, are known ; the principles are the same, and the only variation is in the application of *guides*, the *quick pace* as the only pace

for movement; forming column at slow march is well enough for a funeral but never for service; and in order to escape the derision of men of experience, it should not be permitted on any occasion. No man who enters into the spirit of military discipline will suffer it.

The elementary exercises of the column should begin with the company, divided into half platoons and sections or fourths of platoons.

The company being drawn up as usual, in the usual order, receives the

Ruffle—(for attention.)

TAKE CARE TO FORM COLUMN IN OPEN ORDER UPON THE
RIGHT HALF PLATOON, RIGHT IN FRONT.

Left half platoon—right face.

Right quarter face—march.

Front face—halt.

The same movement by quarter platoons formed on the left.

TAKE CARE TO FORM COLUMN OF QUARTER PLATOONS...
LEFT IN FRONT.

Ruffle—(for a caution.)

Mark time.

Right sections—left face.

MARCH.

Left quarter face—march.

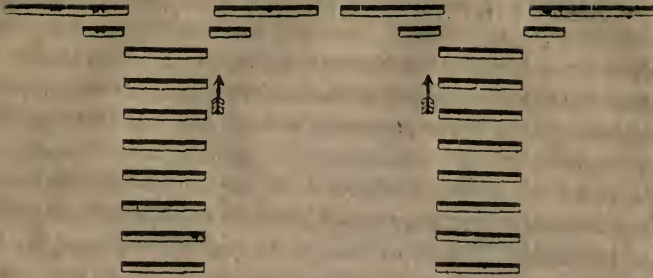
Front—halt.



§ 5. After a front line has given a certain quantity of fire; or that an impression has been premeditatedly made by the tirailleurs or riflemen in front, to cover the movement of the second line as a fresh corps, to bring them to the charge of bayonet, the following will convey an idea of the two operations advancing and retreating in column by the centre of battalions.

First line, centre half platoons thrown back.

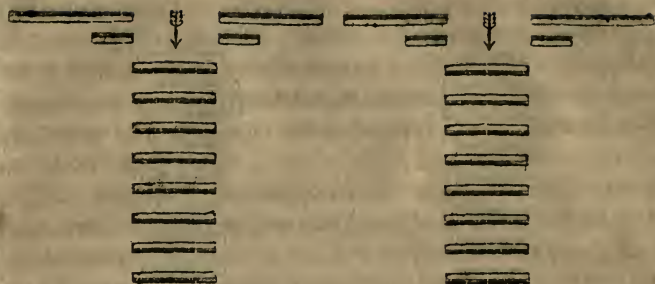
Second line advancing in columns formed upon the centre.



The retreating line acts differently from the advancing : for the same reason that the echequier of platoons is exploded, and as a retreat admits of no loss of time in formation, when the first line indicates by a movement on its right or left the purpose to retreat ; the second line will immediately form columns on the centre of battalions ; meanwhile the first line retires in perfect order, and when it reaches the second line now formed in columns, the first line throws back the two central half platoons of each battalion in order to pass the columns, the first line is now to become the second, and assumes a front towards the enemy, forms columns to that front, and is ready to support the second now in the position of the first.

The second line being in column when the first moved through the centre, will act as ordered ; it will either reduce the column and display the line, or it will advance in column and display, as may be ordered ; the dispositions to the eye in this case are apparently similar ; the difference consists in this, that in retreat, the moving line preserves that order and passes with only throwing back two half platoons, while the posted second line forms column on its position.

On the other hand, in the advance, the second line forms and moves in column to the front and through the centre of the battalion of the first line, which remain displayed in line only with its two central half platoons thrown back to admit the passage of the second line in column....the following figure exhibits the retreating first line :



The passage of lines, by alternate platoons, which is laid down in the French regulations of 1791, and adopted from thence by the English, has been superceded, in the French system, wherever the movement is in the face of an enemy. The exceptions to the old method are these: the line retiring, if in retreat, is too much broken; and the single company is not sufficiently strong to sustain a sudden attack; the second line in like manner loses its compactness, which is essential to repel the charge by being open at several points to admit the passage of alternate companies; the movements cannot be made in good order when in such small bodies and under so many detached commands, and the loss of a platoon or even an officer of one of these detached parts, may endanger the whole.

The method adopted obviates all these objections; instead of echequier of companies, that formation is now confined to bodies not less than a battalion; that is several battalions each maintaining its line of front, either in line or column, may move in echequier, but no such movement, except for disciplinary exercise, must be made of any body less than a battalion.

The movement of a battalion advancing in a line, or retiring through a second line, is by column of platoons formed on the centre of the battalion; that is the two central half platoons form the head of the column, whether it be a second line advancing, from the rear of the front line posted, to charge bayonet, or retiring through the first line to take a new position 200 yards in the rear of the first line.

These principles being understood, it remains only to suppose several battalions formed in line of battle.

§ 6. These operations apply to the largest bodies; plate VII. annexed, from the Military Library, exhibits the formation of a

column of eight battalions, of two platoons in front ; formed upon the fourth battalion.

The seventh plate is given (though it properly belongs to the evolutions of the line) with a view to illustrate the various applications on the largest scale of numbers, to the same principles developed in the exercises of a company. This plate represents a line of eight battalions. It is required to form the whole into a single column, right in front, with a view to such a movement as was made by the king of Prussia at *Rosbach* and *Kolin* ; the object in view by the movement, and the ground, determines the formation to be on the second half wing of the fourth battalion. The extent of ground covered by such a body, determines the mode of movement. The order is issued through an aid to the commander of each battalion on the right and left, which designates the *front* they are to preserve, and the battalion on which they are to form ; the officers on the left know they must proceed to the right, and in an oblique direction to the rear of the fixed battalion, they calculate the depth of the column and the angle it forms with their then line, and half wheeling their quarter battalions on the right, face to the right, and march as is seen on the left division of the line. The right battalions also throw their quarter battalions into echelon, by a wheel on their right and face to the left.

The *guides* posted in a line between the two trees, determine the prolongation of the column. Manœuvres of this kind are intended to prepare for new dispositions....or for a march.

In this plate the eight battalions are in line, and the order is given to form column two platoons in front ; the right battalion to lead.

The officer in command issues the following order, which is taken down in writing by an aid for the right, and by another for the left, who proceed rapidly, and deliver the order to each commander of battalion.

THE LINE WILL FORM COLUMN, UPON THE THIRD AND
FOURTH PLATOONS OF THE FOURTH BATTALION.

The trees in front and rear serve as guides of alignment or formation of the column ; and the commanders of battalions, as fast as they receive the order, throw their several battalions into the disposition best adapted to reach the point upon which they must form in the shortest time.

The officer of the battalion repeats the order, and follows it thus....

The battalion—left face.

By double platoons—to the right incline.

Forward—march.

Each battalion to the right pursues the same course, only making its route to the right of the preceding battalion.

The battalions on the left face to the right, and pursue a corresponding course to the rear of the fourth platoon; the proper officers attending to the directness of the movement and the correctness of the formation.

§ 7. THE RALLY.

No system of discipline has laid down a method of accustoming troops to retrieve the disorder of a sudden charge, or to rally after being broken. The occasion occurs in almost every close action, but no elementary instruction has made the occurrence familiar....The following method is the result of a very successful drill practice by the author.

After the company has acquired the habit of being moved in echelon with some dexterity, move the several sections, say of 8 or 12 files, in single rank, in different directions, *wheel* one to the *right*, *face* another to the *right*, *wheel* a third to the *left*, *quarter wheel* a fourth, bring a fifth to the *right about*, and march them so that they shall all be in apparent disorder....then select a section, say the third, and give the word :

THE WHOLE....TAKE CARE TO FORM COLUMN ON THE
THIRD SECTION.

[Care then is taken to move the third section to the front required, and each leader of section moves his own section up to its proper place in front or rear of the third section.]

To rally, when the ranks are broken, pursue the same course, always apprising them that at a certain beat of the drum they must rally, when the sections are all thrown into the different directions as above....beat a retreat and give the word *disperse*, the ranks break, and while retiring to their quarters, the rally is beaten....the platoon or section leader should previously arrange some signal to be known to the men of his section, a handkerchief or the like, to which they should rally.

As soon as the drum beats the rally, the leaders of sections or platoons should place themselves so as to display their signals, and each section would then fall in, the whole facing upon the first man posted by the officer, in whatever direction formed :

and as soon as formed in section, they should move so as to form column in the same way as in the preceding movements. This may be diversified greatly to the pleasure of the soldiers, and military men will discern the utility of the habit thus acquired whenever troops are brought to action.

§ 8. FORMING COMPANY.

In § 1, of Chap. IX. the mode of forming by a wheel outward of double files is described. The present purpose is to describe the formation of a company with its officers of both kinds attached, in the order in which they must go into the battalion.

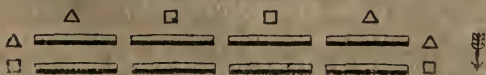
The order of two or three in depth makes no difference as to the positions of any of the officers. The following general rule should be constantly observed.

Whatever may be the position of the company in line or in column, the captain should be posted at *all times on the right*, or at the head of his company; and even when the left may be in front, the captain should still keep his position on the right of the advanced front....The motive for placing the captain and other commissioned officers on the left flank of the company or platoon, was because the ordination made the left the pivot under the ancient discipline, and the captain acted as the guide in those formations which are now performed by pivots and guides of platoon....But these modern and useful contrivances leave the captain and other platoon officers free from other duties, and they always will have ample employment beside, on the march, in manœuvre, and in action.

The corporals are comprehended in the rank and file, and there should be one on each flank of the front rank, the other two may be on the right and left of the half companies or half platoons; or on the left of the rear rank.

The company drawn up, ranked and sized, should, before any movement with the battalion, be told off, and distributed in equal portions for manœuvre, the half company or half platoon, should be subdivided each into two parts or sections, so that each company shall have eight established equal parts.

The company in close order, will then be placed in this position, the strong lines represent the front of the ranks.



The captain on the right, covered by an expert serjeant in the rear rank.

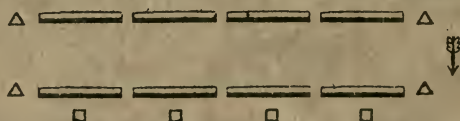
The first lieutenant on the left flank of the front rank covered by an expert serjeant in the rear rank.

The second lieutenant and ensign in a supernumerary rank at three paces from the rear rank, a serjeant on their right and left in the same rank, the four at equal distance from each other. Where the subalterns are more or less in number they must be distributed equally.

The men will stand in rank so that on bending the elbow on either side they each touch the man on that side; the space each man usually occupies in front is 22 inches, 2 inches are allowed for the ease of movement; so that the front of each file is equal to one military pace of 24 inches.

In the depth of the ranks in close order, the heel of the front rank man stands two feet from the toe of the next rank, so that taking the depth of the man to be 16 inches, and his knapsack 6 inches, the single man will occupy exactly 22 inches in depth with the allowance of two inches for movement. So that a single man in military order may be computed as occupying two feet square.

In open order the ranks will stand two paces apart more than in close order; and the officers will be posted as annexed:



The ranks may, for inspection or other purposes, take open order at four or more paces distant, at command.

The supernumerary rank four paces in the rear of the company in close order, is for the purpose of keeping the rear ranks well dressed; and to render assistance of various kinds in action. When marching in close column this supernumerary rank, if there be not room on the flanks of its own company in the column, continues in the rear, but closed up to the same distance as other ranks. The serjeants of the rear rank in open order must attend to the dressing of that rank and move on the rear if necessary.

§ 9. THE BATTALION.

The ordination of the distribution of companies in the battalion in the generality of systems, presents such absurdities as could

hardly be expected from reasonable men. The prevailing notion that governs the distribution of companies, is an imaginary importance attached to the position of a company, deduced from the analogy of the position of battalions in the line of battle. But that may be real and important in relation to the distribution of battalions or columns, which cannot be of any moment in the position of companies either in line or column; simplicity should therefore supercede trifling vagaries.

The order of distribution of companies should be by a fixed, simple and rational rule ; that of numbering from right to left, and the battalion consisting of eight platoons, the 1, 2, 3, 4, should form the right wing or half battalion. The 5, 6, 7, 8, the left ; or if there must be a variation from the simple order, let it be 1, 3, 5, 7, right wing ; 2, 4, 6, 8, the left wing : The companies here shall be placed in a numerical order : and the following is the ordination of the battalion with its staff. To avoid confusion by a multitude of arbitrary characters, it is only necessary to state here that the order of every company in a battalion in close order, conforms to the preceding view of the company ; and so in open order every company presents its officers, commissioned and non-commissioned, in the same positions as in open order of company ; so that the views of the battalion to be here given exhibit only the positions of the regimental staff, music, pioneers, in close and open order.

BATTALION IN CLOSE ORDER.

... Pioneers.

... Staff.

Drums Adjutant ☐ _____ ☒ _____ ☐ _____ ☐ _____ ☐ _____ ☐ _____ Δ Serjt Maj

☐ Lt. Col.

明

1st ☐ Major

☐ Colonel.

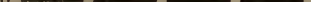
☐ 2d Major.

BATTALION IN OPEN ORDER.

Adj. ☐

□ Serjt. Major.

Drums. Pioneers.

Music.  Pioneers.

Lt. Col. ☐ ☒ 1st Major.

□ Colonel.

2d Major

The artificers which should be attached to every regiment, march in front when there is one corps only in column ; when the battalion is in close order for exercise or line of battle, they are in the rear, together with the subaltern staff, as paymaster, surgeon, quarter master, &c. ; when the battalion parades in open order for inspection, the musicians are all formed on the right, or in two divisions on the right and left of the battalion ; in this order the pioneers parade still farther on the right of the music ; if the music is all on the right, the pioneers parade on the left.

The platoon officers are paraded four paces in front of their companies when in open order : as shewn in the company.

The colonel, when there is only his own regiment, takes post in front equal to the length of a wing from the centre ; if more than his own and the order is line of battle, his position is twenty paces in the rear of the centre, the lieutenant colonel ten paces from the centre of the rear of the right wing ; the first major the same distance from the centre of the left ; the second major, adjutant, paymaster, surgeon, and mates, with the colonel. The colonel may require the lieutenant colonel to remain with him, and the majors to take charge of the battalions.

The battalion in close order for field exercise ; the colonel in front, the lieutenant colonel ten paces from the right and in front of the right wing, the major ten paces from the left. The adjutant as aid to the colonel ; the serjeant major in the rear.

The colors on the right of the second wing in close order ; at open order advanced in a line with the platoon officers four paces in front. The colors to be carried by two ensigns or on a march by four, who relieve each other, and who form the guard of the colors, with four of the most respectable senior serjeants of companies ; the four ensigns form a rank with a serjeant on each side, and are covered by the other serjeants in the rear rank. In open order the non-commissioned officers occupy the front rank with arms advanced.

In column the colonel leads the first wing or battalion ; the lieutenant colonel the second ; the major in the rear, with the regimental staff ; the adjutant and serjeant major on the flanks.

These dispositions are generally conformable to usage ; excepting that the commander of platoon or company must at all times be on the right, whether the left of the column or the right in front.

CHAP. XII.

THE MANUAL EXERCISE.

§ 1. FOR several years the most important object of military discipline was supposed to consist in the performance of certain unmeaning and frivolous motions with the firelock in the hands, which was called the Manual Exercise on that account. During the last ten years this dangerous error has been in a great measure corrected in the general judgment, and it is now perceived and acknowledged, that beside the acquisition of exactness in the handling of the firelock, and loading and firing correctly, and with skill....the knowledge of the different parts of the firelock....the name of each part and its use ; every thing else of the manual exercise is superfluous, or at best ornamental for parades only.

The manual exercise properly consists of two parts ; a manual of discipline, and a manual of parade.

In the manual of discipline should be comprehended all the motions that are required under all circumstances in the use of the firelock for action. The second part would comprehend the first, together with all those motions which are necessary for a parade, for guard, for marching, for convenience, or for show.

The only effectual parts of the manual, are those which go into action, they are the priming, loading and firing, the fixing and charging of bayonets, and the manner of carrying the firelock ; all other motions are motions of *convenience*, and therefore proper to be observed....or motions of *parade* or respect, which may be preserved or rejected without disadvantage. Among the motions of convenience are the *slope*, *trail*, *advance*, *support*, the *secure* and the *stacking* or *filing* of arms ; motions have been in use which are improper, such as grounding arms. It is strictly in the spirit of good discipline, not to accustom men to any motions which convey *humiliating ideas* ; an American citizen must disdain submission to any invader. The *laying down arms* being the last act of subjection of a vanquished army, and like passing under the yoke among the ancients, has been banished from our exercise.

Independent of the policy, there is also utility in rejecting the motions of grounding and taking up firelocks. On service in the field it is never proper nor useful....on duty as sentinels, it is not

admissible; and as a matter of prudence and economy, it ought not to be suffered. Iron acquires rust very rapidly in every part of our country. Laying the firelock on the moist earth or grass, is therefore destructive to arms and to ammunition. The stacking of arms by two contiguous files in the order of two deep, or in the order of three deep, is now the mode adopted; stacking the firelocks of the three is easy, by facing the centre rank to the right, and stepping with the left foot six inches backward; and the front rank coming to the right about; the firelocks stand in regular order: they are secured from moisture, and are easily resumed by the members on returning into the ranks.

§ 2. FIRST DRILL OF THE MANUAL.

The drill of the manual should comprehend all that is practical in the motions made in actual priming and loading, and the carriage of the firelock in battalion; and afterwards all that is merely ornamental. The preliminary drill with the firelock should commence with the priming and loading.

The soldier having taken his place in the rank for drill with ordered arms, the precaution is given:

Attention!

The soldier stands firm, his eyes to the front, his left hand down by his side, not constrained but straight; his right hand fingers on front of the firelock, the butt of which is close to his right foot and dressed with it; the barrel rests against the right shoulder, the thumb of the right hand behind the barrel, the arm a little bent....and the following motions are executed in the manner described:

1. *Recover arms.*
2. *Open pan.*
3. *Handle cartridge.*
4. *Prime.*
5. *Shut pan.*
6. *Load.*
7. *Draw ramrod.*
8. *Ram down.*
9. *Return ramrod.*
10. *Make ready.*
11. *Aim.*
12. *Fire.*
13. *Half cock.*
14. *Shoulder arms.*
15. *Shut pan.*
16. *Order arms.*

EXPLANATIONS.

RECOVER ARMS....*Two motions....*1. The right arm, which was somewhat bent, is straightened, and the firelock is seized as low down as is practicable without stooping. 2. The firelock is brought briskly up, perpendicular in front of the right arm, so that the left hand catches the stock at the swell, the right hand holds the handle or small of the stock, the ramrod to the front.

OPEN PAN....*Three motions....*1. The firelock is now lowered to the *port* or priming position, the piece resting on the left hand, the butt thrown by the right side, so that it rests about the hip, with the person of the soldier half faced to the right. The muzzles of the rank of the same elevation will all range to the front; on about a level with the top of the head. 2. As the firelock is brought to the slope, the right foot is raised, and the body gently half faced to the right. 3. The hammer is thrown open with the thumb of the right hand.

HANDLE CARTRIDGE....*two motions....*1. The right hand opens the cartridge box, seizes the cartridge, shuts the case of the cartridge box. 2. Bite the top of the cartridge off.

PRIME....*two motions....*1. Pour the priming into the pan. 2. Bring the two latter fingers of the hand before the hammer.

SHUT PAN....*two motions....*1. With the cartridge between the two fore-fingers and thumb, the pan is shut by the third and fourth fingers hooked. 2. The but is then suffered to sink gently through the left hand to the front, so that when it reaches the ground the but shall rest on the ground opposite the toe of the left foot, and the muzzle sloped so as to stand in front of the right breast 10 inches from the body.

LOAD....*one motion....*The cartridge is then emptied into the muzzle and the empty paper pushed in with the finger.

DRAW RAMROD....*two motions....*1. The rammer is then seized with the thumb and two first fingers of the right hand, and drawn up about a foot, with the right hand so turned that the back of the hand shall be towards the face, and the little finger uppermost. 2. The rod is thus drawn out and the hand adroitly turned so that the broad end of the rammer shall be placed in the muzzle and the little finger undermost.

RAM DOWN....*two motions....*1. When firing with powder the firelock is raised perpendicular and a slight stroke is given with the heel of the but on the ground to level the powder. 2. The

wadding is then rammed down the barrel in the perpendicular position.

RETURN RAMROD....*two motions*....1. The rammer is again briskly raised eight inches or a foot with the thumb and two fingers, and as before seized with the reversed hand, drawn out, and turned. 2. The ramrod is returned to its place with a pressure of the palm of the hand; the body still retaining its half faced positions.

MAKE READY....*Two motions*....1. The firelock is now brought up to the same position as on the word *recover arms*; the left hand holding the firelock perpendicular opposite the left eye; the right hand holds the but at the grasp. 2. The firelock is cocked with the thumb of the right hand.

AIM....*Two motions*....1. The firelock held by the right hand is now thrown gently into a horizontal position to the front, and caught on the palm of the left hand which is easily extended with an elbow slightly bent to the front; the sole of the but is placed against the right shoulder. 2. The right foot is thrown back about six inches, and the left eye being shut the right eye glances along the barrel.

FIRE....*Two motions*....1. The fore finger of the right hand pulls the trigger; and, 2. as soon as the fire is made, the firelock is again brought to the *port* or priming position; or the word *recover arms* is given when firing has ceased; and it is followed in either case by

[The use of the second finger at the trigger is recommended where the structure of the hand will allow it; the fore finger will then be placed before the guard of the trigger and the middle finger within; this method prevents any jarring of the firelock in the act of firing.]

HALF COCK....*One motion*...If this be done as preparatory to firing, it is done in the priming position, sloped to the front by seizing the cock with the fore fingers and thumb of the right hand; if it follows the *recover*, then it is followed by *Shoulder arms*; but if the firing continues, then the position half faced to the right is retained, and priming and loading goes on in that position. When the firing is closed, then

SHOULDER ARMS....*four motions*....1. The left hand, which held the firelock with the arm a little bent below, is now carried as low down as possible without bending the body. 2. The firelock is brought up to the shoulder so that the left hand shall with

the back in front be as high as the eyes. 3. The right hand crosses the body at the same instant, and holds the but at the grasp under the lock, and the left hand quitting its hold, is brought down open and flat, and *tells* upon the but, the thumb to the front, the sole of the but lying well on the half palm and inner joint of the fingers forming a hollow in the hand, upon which it rests so that the barrel shall be perpendicular. 4. The body fronts as the firelock reaches the shoulder.

SHUT PAN....*Three motions....*1. The firelock being at the shoulder, the right hand open is carried across the breast. 2. The pan is shut with the palm. 3. The hand brought again to the right side.

ORDER ARMS....*Three motions....*1. The firelock held on the left hand with an elbow somewhat bent, not so much as to place the but too low, is now lowered the whole length of the left arm. 2. The right hand seizes the firelock above the lock. 3. Brings it across the body, to the right side, where it is suffered to slide perpendicular to the first position on the outside of the right foot.

§ 3. MANUAL OF PARADE.

The soldier reaches parade with his arms trailed or sloped; and on falling in he comes to an order at ease without word of command. On the beat of the drum as a preparative, or command of the officer....*attention*, the ranks *dress* to the right or left as required. The officer then gives the precaution.

TAKE CARE TO PERFORM THE MANUAL EXERCISE OF PARADE.

1. *Fix bayonets.*

In this motion, the firelock is seized with the left hand, about the upper band, and without moving the but from the side of the right foot, is thrown easily in front of the body in a sloping position; the right hand is carried at the same moment between the firelock and the body to the bayonet, which is seized and fixed briskly on the firelock, which is then brought into the position of the order.

2. *Prime and load.*

This comprehends the ten first motions in the first drill of the manual; here it is executed at one word of command, the motions are....1. *recover* from the order....2. *open pan*....3. *handle cartridge*....4. *prime*....5. *shut pan*....6. *load*....7. *draw ramrod*....8. *ram cartridge*....9. *return ramrod*....10. *make ready*.

3. *Make ready.*
4. *Take aim.*
5. *Fire.*
6. *Half cock.*
7. *Charge bayonet.*
8. *Prime and load.*
9. *Present arms.*
10. *Advance arms.*
11. *Order arms.*
12. *Handle arms.*
13. *Unfix bayonet.*
14. *Trail arms.*
15. *Shoulder arms.*
16. *Support arms.*
17. *Carry arms.*
18. *Secure arms.*
19. *Shoulder arms.*
20. *Slope arms.*

The manual of parade consists of twenty words of command, in the strict order of duty in action, beside the firing motions of the first drill; the eighth is the precautionary load after a successful charge, and the enemy has been defeated; and the advance a motion of ease, on resuming the order of parade after action; the ninth, the salute to the commanding officer after victory; and the trail and order, the movements of ease and rest after action.

Here the repeated *shouldering*, the *grounding*, and *taking up*, are all omitted; and no motion is repeated but the priming and loading motions, which cannot be too often or dextrously performed.

The manual of discipline should comprehend all these motions, and convey plain ideas of the duties to be performed.—The disciplinary and parade manual then might begin with the motions indicative of this principle, as fixing bayonet, and priming and loading.

There remains but to explain the motions of the manual of parade and discipline not before described.

EXPLANATIONS.

FIX BAYONET.... This operation is performed in two modes, at the right and at the left side. At the right side, it is performed at the order, by drawing the bayonet from the scabbard and fixing it on with the right hand, and letting the firelock remain at the order. ¶ This is the shortest and best method; the other

method from the shoulder, may be performed from the shoulder, in five motions, in this manner : at the word *fix bayonets*, 1. the right hand crosses the body and holds the grasp ; 2. the left hand is carried up and seizes the firelock ; 3. it is brought down with the left hand to the left side ; 4. the bayonet is there fixed, which is followed, 5. by the shoulder.

CHARGE BAYONET....*Two motions....*1. seize the firelock at the handle. 2. Bring it to a horizontal position in front, the butt on a level with the hip, the right hand thrown a little behind the right side with the arm bent, and the left hand holding the firelock firmly at the swell.

PRIME AND LOAD—(As before.)

PRESENT ARMS....*Four motions....*1. Seize the firelock at the handle with the right hand, bring it to the front of the left eye with the *lock* in front. 2. Strike the firelock with the palm of the left hand on the sling or ramrod, the cock on a level with the nipple of the left breast. 3. With the right hand sink the butt in front of the left thigh, so that the cock may be on a range with the navel ; the barrel in front of the left eye, the lock to the right side and left hand gently grasping the firelock at the swell. 4. The right foot drawn back so as that the heel of the left foot shall be near the hollow of the right.

ADVANCE ARMS....is the position in which serjeants carry their arms, in battalion ; it may be executed from the shoulder, the order, the recover, or the present ; it consists in bringing the firelock to the right side, in such a way as that the barrel shall rest against the right shoulder ; the right hand first and second fingers shall be placed under the guard....the third and fourth fingers behind the stock....and the thumb on the top of the guard—and the firelock thus suspended with an easy bent arm,

ORDER ARMS...four motions....1. Carry the left hand across the breast, and seize the firelock with the left hand firmly in its place. 2. Carry the right hand up in front of the firelock and seize it with the right hand in its place. 3. Withdraw the left hand and bring it handsomely to the left side. 4. Bring down the firelock with the butt briskly to the ground at the same instant ; fingers in front.

HANDLE ARMS....This word of command may be used to bring the rank to dress when the men are at ease, when they usually hold the firelock with the right hand about the muzzle ; then it consists in bringing the hand down to the front, with the

thumb behind the barrel...in the case of the hand being already extended down, it is used as a preparative for fixing bayonet, or as a corrective of an imperfect execution of the motion with the hand down...in both cases it consists of *one motion* only.

UNFIX BAYONETS....*four motions....*1. Throw the muzzle of the firelock forward from the order with the right hand. 2. Force the bayonet by striking the ball of the right thumb against the shoulder and unscrew the bayonet. 3. Return the bayonet to the scabbard. 4. Draw back the firelock to the position of the order with the hand in front of the piece below. 5. Carry the left hand to the left side.

This command may be executed from the shoulder in *four motions*. 1. Carry the right hand under the lock to the band of the firelock. 2. Carry the left hand up so as to hold the firelock easily. 3. Bring the firelock down to the left side, let the muzzle rest against the left arm. 4. Unfix the bayonet and return it to the scabbard. In this case it may be followed by *shoulder* or the *recover*, and *firing motions*.

TRAIL ARMS....*two motions....*May be executed from the order, from the shoulder, or the advance : It consists, 1. In seizing the firelock with the right hand, sufficiently low down on the swell. 2. Carry it down to the right side, so that the firelock shall slope about eight inches in front of the body by the right side, and the butts of the rank shall dress behind, and the muzzles dress in front.

SHOULDER ARMS....(As before.)

SUPPORT ARMS....*two motions....*Is a motion executed from the shoulder, and is performed by, 1. Throwing the right hand across the body, and seizing the firelock by the handle. 2. Throwing the left hand over the right arm, so that the cock of the firelock shall rest on the left arm.

CARRY ARMS....*two motions....*Is simply, 1. Carrying the left hand to the butt, and making it tell, and holding the firelock at the shoulder. 2. The right hand at the same moment resuming its place by the right side.

SECURE ARMS....*three motions....*This is a motion to secure the arms against rain or weather ; it is performed from the shoulder. 1. Carry the right hand across the body to hold the firelock. 2. The left hand is thrown up in front of the barrel. 3. The muzzle of the firelock is brought on the left hand down to the front, sloped towards the ground, and within from four to six inches ; the lock comes under the left arm ; the toe of the butt is uppermost, and behind the left arm.

*SLOPE ARMS....one motion....*Is performed from the shoulder, and consists in throwing the firelock into a gent'e slope on the shoulder, so that the butt shall advance three or four inches in front.

The *secure* and the *trail*...are never performed with fixed bayonets.

§ 4. OF THE FIRE.

Of all the branches of the military art, none has undergone a greater variety of changes, none has been so long ill digested and complicated, as the mode of fire. It has been a matter of dispute among the most distinguished officers for a century ; each endeavoring to bring it to perfection in his own way ; by charging carefully...by charging with given proportions of powder...by ramming down...by dispensing with the ramrod and depending upon the weight of the ball and the shock of the butt against the ground ; then came the principles of extension, or of giving a long line of fire....then the order of formation in two, three, four ranks, one or two of which kneeling...then the volley firing ; firing by ranks, by sub-divisions and platoons ; the kneeling of front ranks ; and at last, the execution of the greatest number of discharges of the firelock in a minute, as Guibert very truly says, only encreasing the noise, smoke, and confusion of action, without any other effect.

For a long time it was not perceived, that in order to render fire effective, the exercise of loading and firing should be plain and unincumbered by useless motions ; that loading carefully was essential to the regular effect ; and that excessive hurry, or making a greater or lesser number of explosions, was not the object, but to produce effect by the shot. In time it came to be discovered, that in action not one shot out of 100 hit an extended object as high as the head of a horse, at three hundred feet distance : and then distance became a consideration ; the cool, deliberate and effective fire of the militia corps in the war of our revolution, tended to introduce into European warfare considerations on the inefficacy of the fire, as then practised in their armies. In real service it is impossible, after the first fire, to keep up a regular volley, or even a platoon fire, modern tactics has therefore exploded the old theories, and reserved the fire of divisions, or platoons, only for special circumstances, instead of being the general regulation ; the practice now in all armies is the fire deliberate and composed as each man loads.

In like manner it was found, that in the tumult of action the rear of the three ranks killed more men of their own front rank

than fell by the balls of the enemy ; the rear rank now loads its firelocks for the centre rank ; and the centre rank men load their own and fire their own firelocks, as well as those of the rear rank, in the following manner : the order of formation being files of three in depth ; the front rank man loads and fires his own piece : the centre rank man fires his own piece, brings it down in his left hand, and presents it to the left hand of the rear rank man ; the rear rank man hands his own loaded piece with his right hand into the right hand of the centre rank man who fires it, and loads the rear rank man's piece and fires it ; and then returns it and receives and fires his own, loads and fires it, and returns it. Thus the centre rank man loads only one of every two shots he fires ; the rear rank man does nothing but load.

Plate 10, presents to the eye these dispositions : the first or three upper figures represent a file of three deep, the front and centre rank men firing, the rear rank man priming. The second group represents the same file of three, the front rank firing, the centre rank priming after his first fire, and the rear rank loading ; the third group represents the front rank firing, the second rank faced about delivering the firelock he had fired to the rear rank man, who presents his firelock, loaded, to the centre rank man.

Experience also taught that in order to know the use of the firelock, it was necessary to examine how the shot acts, in order to obtain definite ideas.

First, on the *line of level*, that is to say, the straight line, from the eye to the object at which the ball is directed.

Secondly, the *line of fire*, a straight line, which represents the axis of the musket.

Thirdly, the *line of trajectory* described by the ball, which is projected by the powder from the calibre of the piece to the spot it is intended to strike.

The *line of level*, and the *line of fire*, are by no means parallel, for according to the different weight of metal which the barrel has at its breaching, and at its muzzle, they describe an angle more or less acute beyond the tube ; the eye seeks its aim along the exterior of the barrel, while the ball put in motion is impelled from the interior part of the barrel, to the length of the line of fire ; but the line of level and the line of fire become secant at certain distance, or in other words cross each other.

On the delivery of the ball from the cylinder, its path begins to trace a curve line ascending, which is begun by the body in motion, at a small distance from the mouth of the barrel, and immediately cuts the line of level, passing it upward at a certain distance ; from thence at a given distance it is drawn to the earth by gravitation, and inclines to the level line, cuts it again, and finishes its parabolic course to the end of its fall ; it is this second point of intersection which is called the *point blanc* ; and which in proportion to the inclination of the angle which is formed by the line of level and the path of the ball, is more or less distinct from the extremity of the barrel, and thus in the same manner they act in proportion to the force which impels the ball, from its own volume, from that of its density, from the resistance of the air in the space which it traverses, and the length of the calibre, proportioned according to the diameter.

The *point blanc* or the *white spot*, is so named from the French who painted their targets black, and the central spot *white*.

What is here said relates to a common property of all fire arms ; and all round shot from a smooth calibre proceed in this curvilinear course. The horizontal shot of a musket may be computed at 180 toises, or 1080 feet, yet where the fire of infantry can have any great effect, it is seldom more than at 80 toises, 160 yards, or 480 feet ; that is of infantry arranged in battle, and in the tumult of an action. Beyond this distance the shot is uncertain, for the soldier in his hurry and confusion loads hastily, levels worse, trusts to chance in his fire, and is usually devoid of that composure which could insure execution.

The soldier having, by the manual exercise, acquired a perfect habit in his loading and in his fire, at first exercised alone, then in file, afterwards in the front, centre and rear of the file, in several files by division, and in company, he should next be conducted by practice through the same gradations to fire with ball at a target, upon the principle of the course of the ball ; and to know, that the *aim* must be taken high or low according to the distance of the object fired at.

Particular attention to the quality and condition of the arms, is an essential part of military duty ; the French consider it economical to provide one serviceable firelock instead of five or ten that will not stand a day's service.

APPENDIX.

Although the immediate duties of officers in battalion belong rather to a system more than elementary, the concise enumeration of the duties of every officer in a regiment, cannot be useless where neither the American Military Library nor Military Dictionary are at hand.

DUTIES OF OFFICERS OF BATTALION.

THE COLONEL.

THE colonel of a regiment should be minutely acquainted with every particular of the discipline, subsistence, quarters, arms, clothing, and the character of every officer and private, in his regiment. He should be particularly attentive to the goodness of their provisions, the cleanness of their persons, their quarters, and their place of rest; and he is bound to require the most minute attention to every particular on the part of the officers, and that they report to him promptly every neglect of duty, every abuse of subordination, or any injury done to any and every man, whether in person, or in his property.

The colonel should be competent to manœuvre his regiment, and take the parade, and perform all the functions of command in person. He is bound to do it by duty, and his neglect would be a dangerous example, which might be always pleaded by a subaltern for any omission of duty on his part. The king of Prussia, who drilled his own battalions in the most minute and laborious manner, was rewarded by numerous victories for his practical labor and experience: he thus speaks of the duty of officers: "The affection and reciprocal confidence which is obtained by the officer who performs his duty diligently, rewards his labor. It is not by overlooking their faults, or indulging soldiers in negligence, or bad discipline, their confidence is gained. The soldiers soon discover limited knowledge, incapacity, and a man in whom they could not confide in action; in him who acts in such a manner. He who endeavors to convince the men that his purpose is to enlarge their knowledge, to make them worthy of distinction, to feel that their station is a dignified and honorable one, and acts as if he himself thinks so, will obtain their affection and their confidence; and he will miss his end with only a very few, which are to be found in all situations unworthy of any profession."

On the parade he attends to no concerns but his duty, and never suffers his men to stand in idleness, in order to listen to the prattle of those chatters and flatterers, any more than those quarrelsome and turbulent men, which will always be found scattered through military establishments.

In the exercise of his single regiment, his station is in front of the regiment, distance half the length of his regiment.

When there is more than one regiment, he is either on the right in front, or on its rear if in line, or at its head if in column.

THE LIEUTENANT-COLONEL.

As his title declares, he is the second in command or substitute of the colonel when the former is absent, and is bound to be equally minutely acquainted with the concerns of the regiment as his superior officer; if a regiment has more than one lieutenant-colonel, they will have separate battalions; but they must be always qualified and prepared to perform the same duties as the colonel. The lieutenant-colonel may be called upon to exercise the regiment or battalion by the colonel, and should never be unprepared nor taken by surprise.

THE MAJOR.

The major is the most important officer in a regiment; and upon his skill, activity, and assiduity, will its discipline and internal economy principally depend; he is to the colonel what the chief of the staff is to the commander in chief; he is to the regiment what the adjutant-general and the quarter-master-general and the commissary-general are to an army. He must be a master of military discipline, he must control and examine every department appertaining to the regiment, he must be inflexibly exact and particular in enforcing the performance of their duties by the platoon officers and subalterns; and through him the adjutant superintends the exact performance of duties by the non-commissioned officers; he must possess a register of returns on every detail of duty—parades—drills—guards—picket guards—sick—funerals—the roster of service of platoon officers, and the roster of rank and file—the police and judicial duties, all come to, and pass through him. He is the centre of communication both for orders to be issued and reports to be received. He must exercise and manœuvre the regiment himself, and it is his special care and obligatory on him that the officers be not ignorant of their duty—nor suffered to evade the performance of it. He is bound to see that the drills be directed by officers.

He has to see to the quality of provisions, and to the condition and management of the hospitals, that the sick are not neglected, and that the surgeons perform their duty personally.

He has to see that the arms are good—to inspect them minutely—to examine the state of the ammunition and necessaries of every kind in camp, or quarters. To him the regimental quarter-masters apply, and from him they receive the orders of the colonel, of which he keeps an exact registry.

In evolutions of the line he has charge of the right, and marks the alignment, as the adjutant does on the left. In column his post is in the rear of the second battalion.

When there are two majors, they may divide the duties, each a battalion; or they execute it in rotation, month about.

The regimental books are under the immediate care of the major—and he is the executor of every officer who dies in the service, and is bound to take charge of his effects. All these duties are, however, conducted under the authority of the colonel or commanding officer.

THE CAPTAIN.

The captain is to the company what the colonel is to the regiment; he keeps a company book, in which a daily entry is made of every transaction appertaining to the company—men joined or men removed—clothing received or issued—

pay received, due, or issued—arms—provisions—forage—stores of every kind—medicine—sick—convalescent, and every incident concerning every person in the company. He draws pay and issues it, taking duplicate receipts—he should be a father, friend, and protector to his men: duty should be inflexibly enforced; but kindness and care, in promoting the proper gratifications of his soldiers, should be his constant study.

The drills should be superintended by him—and fatigue parties conducted under his direction: he is bound to see that the subalterns understand and perform their duty; and he should keep a strict register of their conduct on duty, and their private and public deportment—their qualifications—and their neglect or attention to their profession.

He should make out all the returns of his company himself; he should make his subalterns transcribe them, in order that they may be qualified in his absence to perform the company duties.

In exercise the captain is always on the right, or at the head of his company.

In open order of battalion, his place is four paces in front of the second file of the front rank; his place in the front rank is filled by the *guide* or covering serjeant from the right of the rear rank.

In close order of battalion, his place is on the right of the front rank.

In action, his place is on the right of his company in line and column; all battalion officers should carry a light musquetoon of calibre for 10 or 12 pistol balls; or a case of good pistols in their sashes; with eight or ten buck shot.

THE ADJUTANT.

This officer has a variety of active and important duties, and upon him, through the major, all the details of the regiment are conducted. He puts the serjeant major in motion, and through him the serjeants and corporals; he has the charge of all the details which every company furnishes for each branch of duty—guards—hospitals—fatigues—drills—courts of enquiry—courts martial—the apprehension and custody of deserters—the correspondence and issuing of orders to the commanders of companies through the major—he is specially bound to see the subaltern officers drilled and perfected for command, and to exercise them himself, and direct them in the exercise of their duty—he has particular charge of the music and musicians; and the serjeant major, drum major, and quarter-master-serjeants, receive their orders at stated hours from him: and the orderly serjeants of companies attend at his quarters to receive and transcribe all orders for their several companies. Though his duties extend to the communication of orders to the quarter-master's department, when the order is issued, the duty of seeing it fulfilled, devolves on the company officers; but he is bound to report their neglect, and to receive complaints, if any should be made by non-commissioned officers or privates of the company, against the commissioned or non-commissioned officers. He has to make out the roster for courts martial; to swear the members, and in garrison courts martial, or drum head courts martial, he administers the oath, and acts as judge advocate.

He sees all guards which are not commanded by an officer of higher grade than a captain, paraded; and delivers them a parole, and order of the day.

He aids the quarter master in preparations for march, and encampment—by furnishing returns of effective—sick—convalescent, &c.

The adjutant must keep a description list of every officer and soldier in the regiment—according to the established form.

The adjutant receives the sword of an officer put under arrest—and if an officer is sentenced to dishonor, he breaks the sword over his head, cuts the sash, and throws it in his face.

He directs the drumming out of camp or garrison, vagabonds, or persons whom it is deemed disgraceful to permit to wear the uniform of a soldier. The serjeant-major sees it executed.

SUBALTERNS.

The first lieutenant is to the captain what the lieutenant-colonel and major are to the colonel. He must always consider himself bound to see the duties of the company performed in obedience to the captain, and according to the principles of discipline; he should aim to excel, as he aspires to a company, and must take charge of it in the absence of the captain. He should practise in the drills constantly, to acquire the habit of command, and to be prepared by exercise, and with presence of mind, to correct errors in manœuvres, which he can never do unless he has had practical experience; and the drill is the best of all schools to acquire the habit of command. He should in turn with the other subalterns of the company, take a concern in the comfort and gratification of his men—in care of the sick and convalescent—in protecting them from injustice in their persons—clothing—provisions—pay—or any other matter—he should examine and know the use and power of arms—he should be a good swordsman, and be capable of exercising with the *sabre* and *spadroon*—he should know the proportion of powder required to carry any given weight of ball—the range of the shot—the difference and effects of the calibre—and he should be an expert marksman himself, so as to be able to instruct by precept and example in target practice.

In the absence of the captain, he performs all the functions of the captain.

In the exercise of the battalion, his place in close order may be either on the left of the company, or on the right of the half company, if it be divided. The second lieutenant sometimes takes those places, and his place is then in the supernumerary rank, four paces in the rear of the company.

In open order, his place is four paces in front of the second file from the left of the front rank, dressing by the captain on the right.

In column, if the column be formed of an entire company in front, he is in the supernumerary rank, at the open distance, if in open order; if at close order, at two paces.

In echellons the subalterns all attend to the due regulation of distance and movement.

The second lieutenant and ensign have the same obligations and duties to fulfil, as the first lieutenant.

In battalion at close order, they are in the supernumerary rank; in open order in the front, at equal distance from the captain and first lieutenant; the second lieutenant on the right of the two. In column the same as the first lieutenant.

THE SERJEANT MAJOR.

This is a very useful and indispensable officer—it would be desirable, and would conduce to the perfection of discipline, if there were one to every com-

pany. The duties are very heavy on a single serjeant major to a battalion, and it is not easy to find men every way qualified. He is to the serjeants and corporals, what the major is to the platoon officers. He has charge of the details of serjeants, corporals, privates, and musicians for every service, guards, drills, fatigues, &c. and is an indispensable aid to the adjutant.

He should be a complete master of all the exercises of the battalion from the first drill to the movements in line of battle. A serjeant major who feels a pride in his station, and whose conduct is exemplary, may expect with propriety, military promotion.

SERJEANTS.

The non-commissioned officers should be selected from among the most orderly and best qualified men—upon them will depend very much the order and good conduct of the company. They should each have a squad composed of an equal distribution of the men, who should form messes, over which the serjeants and corporals should preside and be responsible for the good and orderly conduct of the mess, the dressing of provisions, the cleaning of their persons, arms, quarters, and clothing.

The serjeants in rotation should see the parties daily turn out for guards—inspect them and their arms—that their clothing be clean—arms in good order—flints good and well fitted—ammunition sufficient and in good condition.

The serjeants make a morning report, one copy for the captain, the other for the serjeant major, who delivers them to the former.

The serjeants make weekly reports of the company, men and arms—reports are delivered to the serjeant major on a stated hour of the day every week; but they must be ready to make report at any hour required, and the corporals aid the serjeants in this duty.

At roll call they should report all who were absent—when upon guard arrange the sentinels, and never be absent from the head quarters of the guard.

The serjeants perform orderly duty, once a week in rotation, of which the serjeant major keeps a roster; the duty of the orderly serjeant is to attend upon and execute such orders as the officer to whom he is attached shall order. The serjeants act as guides and pivots in the evolutions of battalions.

CORPORALS.

These are in fact deputy serjeants—they have the charge of squads in quarters—there is an orderly corporal in quarters always dressed, and whose duty it is to execute such orders as the orderly serjeant is required to have executed. The corporals keep each a roll of the company, and they warn the men for duty. They teach the recruits the manual exercise, instruct them in cleaning arms and accoutrements, and see that they perform this duty each for himself—they take their share of duties in guards, fatigues, the care of ammunition and provisions and storage.

The serjeants and corporals call the rolls at *tattoo* time—and are the first on daily parade, and are exemplary in the neatness of their persons and their sobriety and good demeanor.

The corporals plant the sentinels, the elder corporal has the choice of the route, after an equal distribution.

FINIS.

Plate . 1 .

Fig. 1



Faced Outwards.

Fig. 2.



Marching in Files from the Flanks.

Fig. 3.



*Forming to the Front,
by the Oblique.*

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Plate.II.

Faced to the right of Sections.

Fig.1.



Fig.2.

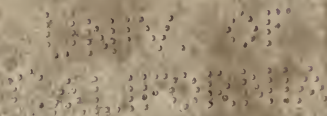


Advancing from the right of Sections.

Fig.3.



Forming to the Front.





THE 1ST BATTALION, 1ST REGIMENT, 1864



THE 2ND BATTALION, 1ST REGIMENT, 1864



THE 3RD BATTALION, 1ST REGIMENT, 1864

Plate. III.

Fig1.



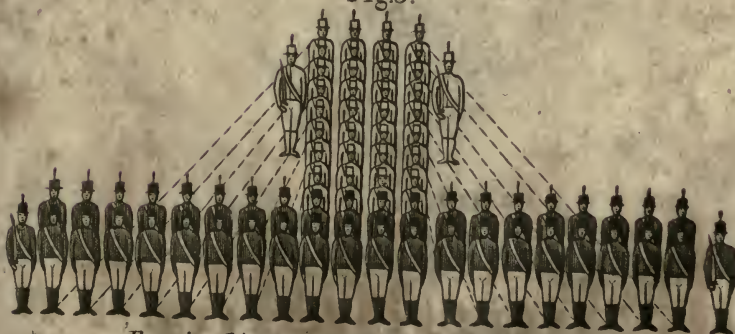
Faced inwards to the four Center files.

Fig 2.



Column advancing.

Fig3.



Forming Line upon the four Center files.



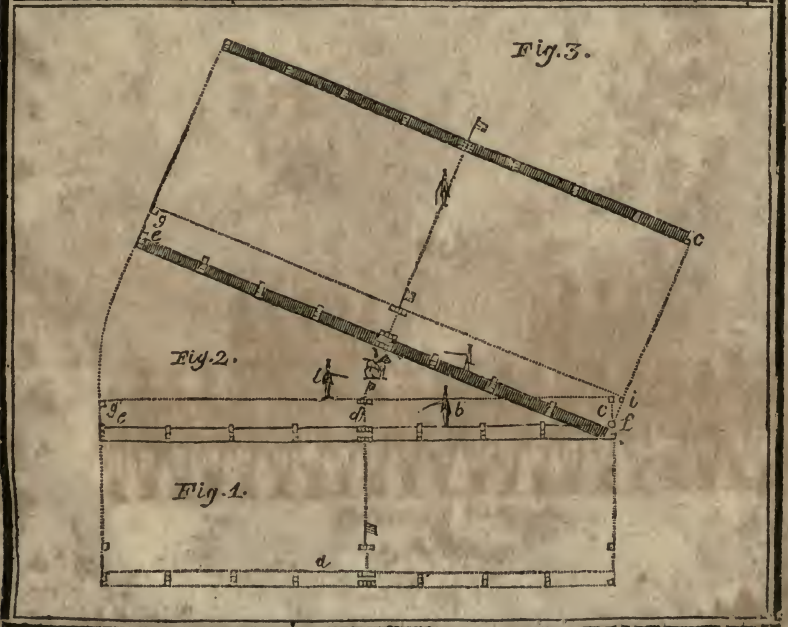
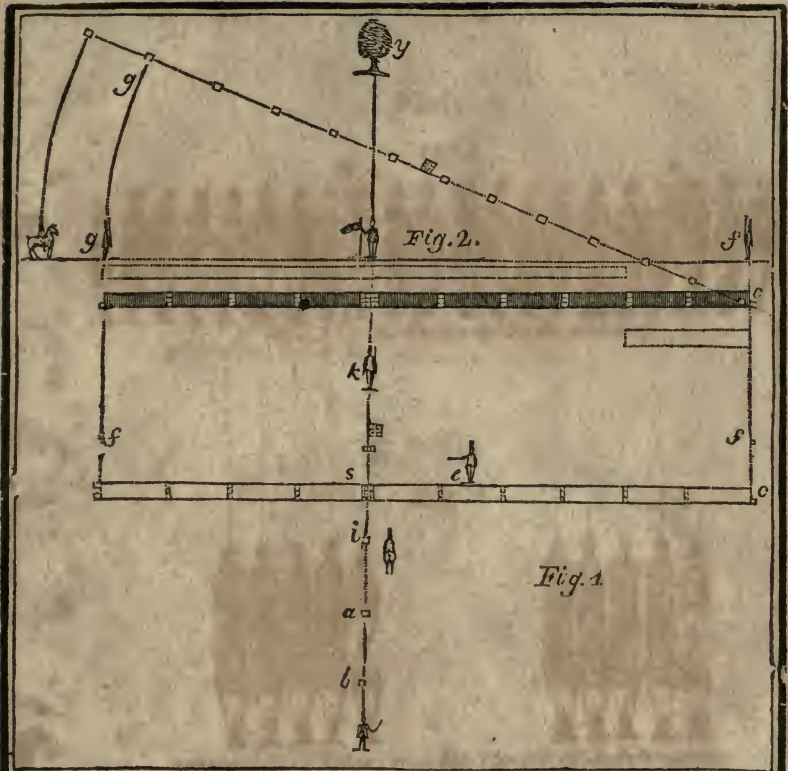








Fig. 2.

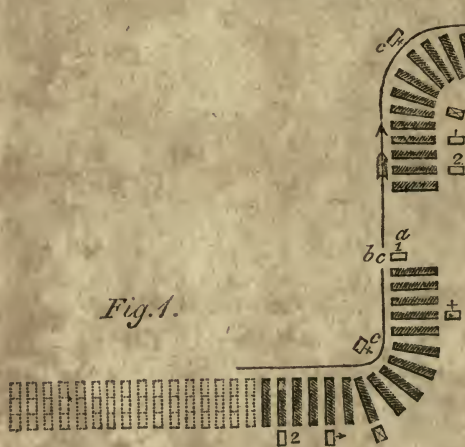


Fig. 1.

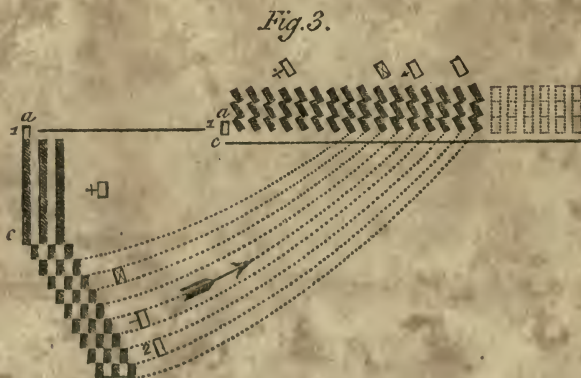


Fig. 3.









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Plate.



7



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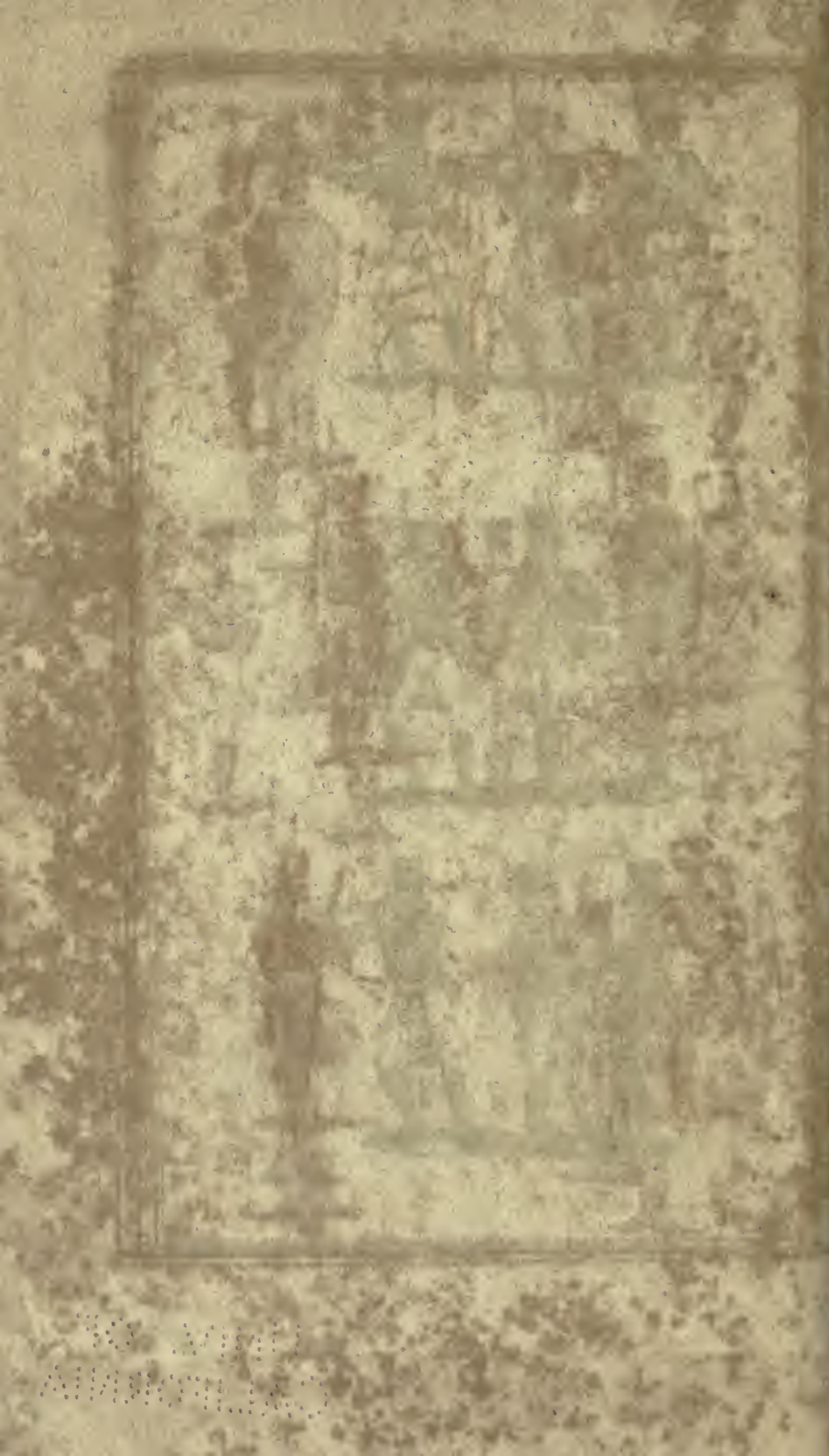
Plate.





Plate.

LOAN OF
EXHIBITION







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14



15



16



17

Funeral Motions.

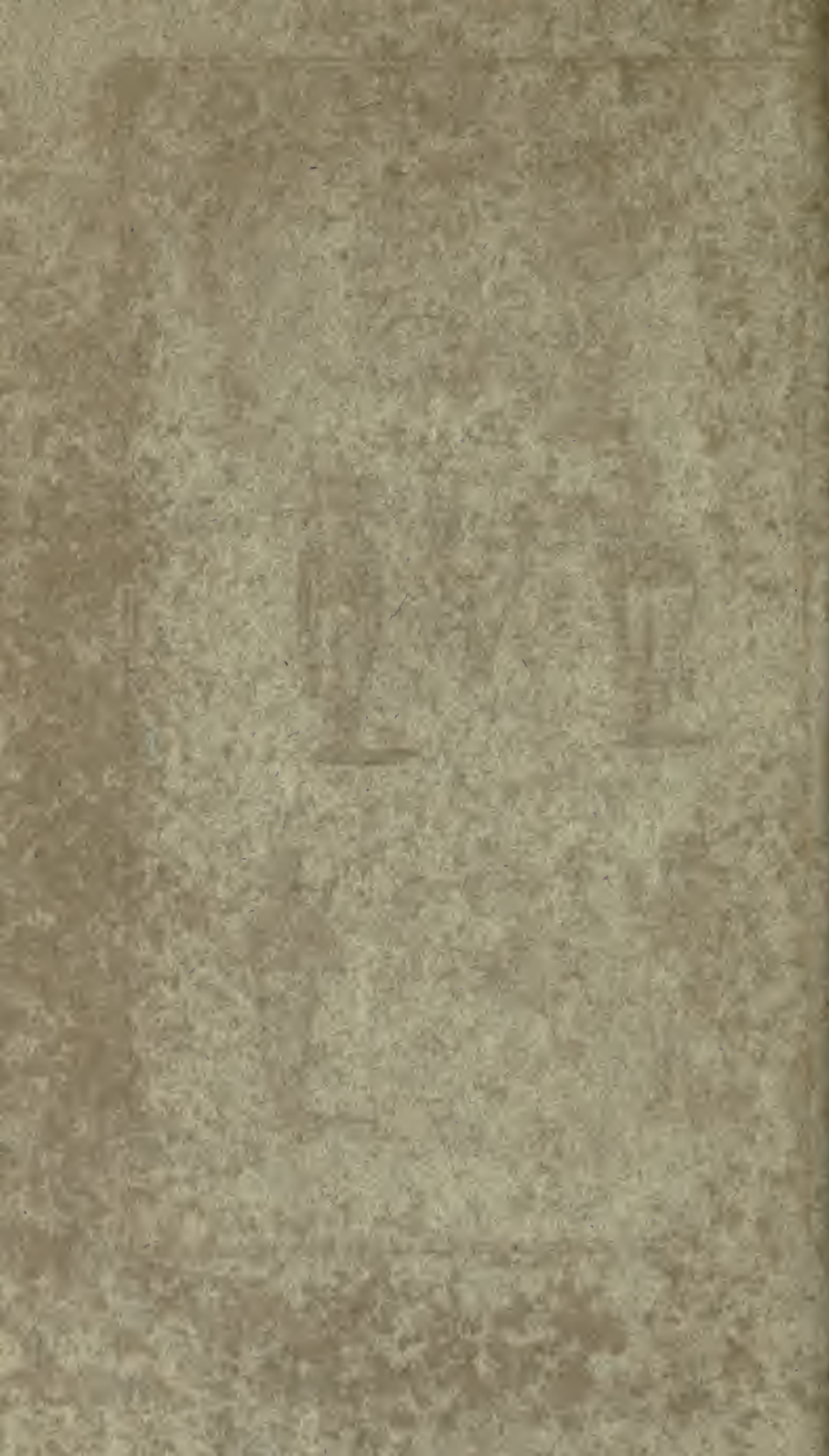


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